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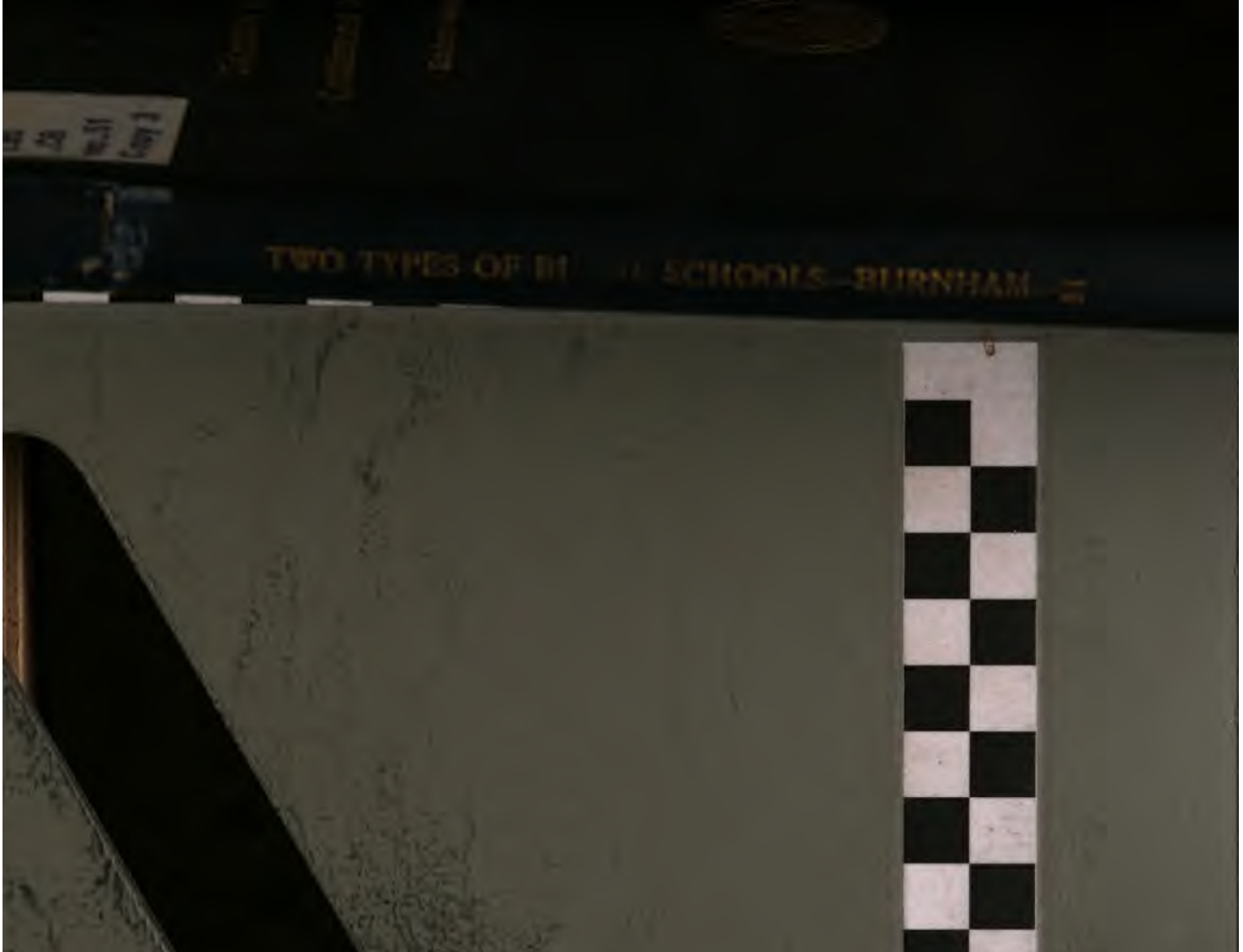
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TWO TYPES OF RURAL SCHOOLS

WITH SOME FACTS SHOWING ECONOMIC AND SOCIAL CONDITIONS

BY

ERNEST BURNHAM, PH.D.

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TEACHERS COLLEGE, COLUMBIA UNIVERSITY
CONTRIBUTIONS TO EDUCATION, No. 51

PUBLISHED BY
Teachers College, Columbia University
NEW YORK CITY
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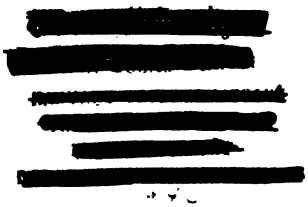

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ACKNOWLEDGMENTS

This study has been made enjoyable by the generous contribution of effort and the spirit of cheer by teachers and by citizens generally in the localities surveyed. The author's indebtedness is gratefully acknowledged. Special thanks are due to Dr. Frank M. McMurry and Dr. George D. Strayer of Teachers College, Dr. Edward C. Elliott of the University of Wisconsin, and Dr. L. H. Bailey of Cornell University, for advice in determining the general plan, and to Dr. McMurry and Dr. Strayer for specific directions in detail made during the progress of the work; to Mr. Sheridan Mapes, Commissioner of Schools, Kalamazoo County, Michigan, for the use of his official facilities for gathering data; to Dr. L. D. Coffman, Charleston, Illinois, for very helpful suggestions; to President Dwight B. Waldo of the Western Michigan Normal School for providing the opportunity to make the study; to Mr. John Phelan and other colleagues of the author in the faculty of the Western Michigan Normal School, for making the early completion of the work possible by relieving the writer of part of his teaching; and to his wife for unremitting care in collaboration throughout the whole undertaking.

E. B.

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CHAPTER I

INTRODUCTION

Purpose

The purpose of this study is to assemble reliable and correctly correlated data about the two types of rural schools most commonly under discussion at present—the district school and the consolidated school. Facts of economic and social significance have been collected and tabulated, and these results are presented as preliminary to, and as essential to the best understanding of the information about the schools. A knowledge of the financial limitation and the existing ingrained social and intellectual standards of any locality, should aid in minimizing the margin of error sure to be found in an unqualified and uncorrelated study of the schools alone.

The purpose in mind takes a dual character when direct application for immediate and future practical results becomes the chief consideration. First in order is a desire to use modern scientific method in dealing with the question of rural education —a question too long bandied about, for the most part, in the fog of mere opinion. And second, is the resolution to add a true contribution, even though limited to the size of a teacher's purse, to the slowly accumulating fund of public information, to which the constructive public school agencies of today and the historians of education of the present and future may turn for trustworthy source material.

A serious difficulty, which threatens the fidelity of the student to the before-stated purpose, is the fact of immersion in the problem itself at the same time that he is trying to make his study critically true. Facts and conditions come clearly into his purview which arouse pity, shame, indignation; and, at the same time, his attention may be intermittently absorbed in real

satisfaction upon the identification of many services of great value, which public education has all along rendered in rural communities. In short, the difficulty for the student who is also a participant in the field of his study, is to maintain in his thinking the scientific attitude rather than the advocate attitude.

Scope

In order to apply methods of tabulation and comparison to advantage, the scope of an investigation must be broad enough to yield numerals running into sufficient figures, from a merely mechanical point of view; and there must also be sufficient scope to take in units of familiar denominations, either political or geographical. Political units such as precincts, villages, townships, official districts for school or other purposes, counties, and others, give terms which are in the current vocabulary; likewise, such geographical terms as section or square mile, township, county, and so forth, while less comparable as between localities, with the exception of the section, and less definitely visual, because much less often subjects of public discussion, are more economical for use than wholly new units.

Fortunately, political and geographical units coincide in many instances where public school administration is involved; and in other cases, unlike school denominations are readily reducible to a common denominator, either political, geographical, or both. Where neither of these divisors can be used to advantage, the numbers under consideration may lend themselves to expression in percentages, thus affording a usable basis of comparison.

The Survey Idea

The survey idea, the taking of stock of existing conditions in itemized details, is growing rapidly into wide application in various fields of human activity. This idea seems to be well adapted for use in a scientific study of education. The far flung, and oftentimes far fetched, inspirational vision which, clothed in glowing terms, is the splendid shibboleth of many an educational leader, makes its own contribution to progress. Brought to earth and reduced to terms of actual fact, inspiring visions, if true, may well multiply rather than divide their power to serve humanity.

In an address before the Training Conference for Rural Leaders, Cornell University, July 26, 1911, Dean L. H. Bailey urged the importance of the survey in country-life work, as follows:

"The goal of survey-work in agriculture is to make a record of *the entire situation* and to tell the *whole truth.* Fragmentary surveys and piece-work, however good they may be in themselves, do not represent the best effort in surveys. Practically all our surveys have thus far been fragmentary or unrelated, but this is the work of a beginning epoch. We shall almost necessarily be obliged to do still further fractional and detached work: but it is time that we begin to train the imagination on completer and sounder programs. The whole basis and condition of the rural community must be known and recorded. The community must know where it stands. It must understand its assets and its liabilities."

In the personal direction of men engaged in this work, Dean Bailey's injunction, emphasized by repetition and copious illustration, is: "Be sure of the accuracy of your facts and then keep strictly within your facts in any results or general conclusions which you derive." He says that only a genius can tell the truth without the facts, and that he is coming to believe that even the geniuses, who are credited with the great intuitional thoughts of mankind, were after all controlled by the facts which functioned through them by means of race inheritance or otherwise.

Be this as it may and granting that adequate surveys require such financing and manning as can be expected only from some governmental agency like the agricultural colleges, or some great private foundation like the Russell Sage Foundation, there yet remains the necessity for multiplied detached or topical studies for the inoculation of the general public with the survey idea and for the development, by experience in actual survey work, of a group of students to whom the larger tasks of adequate backing may be confided with reasonable hope of successful issue.

Local Areas Chosen

The local areas chosen for this study are in Trumbull County, Ohio, and in Kalamazoo County, Michigan. For school data, the four townships of Kinsman, Vernon, Gustavus, and John-

ston, situated in the northeast quarter of Trumbull County, which is the second county south of Lake Erie on the Ohio-Pennsylvania boundary, were chosen to represent the consolidated type of school organization. The townships of Alamo, Cooper, Richland, and Ross, situated in the north quarter of Kalamazoo County, which is the second county east of Lake Michigan in the second tier of counties north of the Michigan-Indiana boundary, were chosen to represent the district type of school organization. (See maps in Appendix B.)

These particular areas were selected for several apparently advantageous reasons. The Ohio area had been studied with considerable care a number of times and the results of these studies were available as matters of record. The *Ohio Farmer,* in its issues of February 3 and 10, 1906, published a brief but well written and fully illustrated study of Trumbull County centralized schools, by Mr. H. A. Diehl, a teacher of Ashtabula, Ohio. Under date of February, 1910, Professor A. B. Graham, Superintendent of Agricultural Extension in the State University, Columbus, Ohio, published two bulletins; one dealing in great detail with district schools in Ohio, and the other treating the centralized or consolidated schools of Ohio, with equally searching itemization. There was issued from the Office of Experiment Stations, U. S. Department of Agriculture, in October, 1910, Bulletin No. 232 by Mr. George W. Knorr. This bulletin presented the most prolonged and thorough general investigation of consolidated rural schools that had yet been made. The Trumbull County area was one of the centers of the study reported in this bulletin.

Studies of the special area under consideration in Michigan were also matters of record and thus available for use in further investigation. The annual report of the State Department of Public Instruction for 1905 presents the results of a special study of Richland township, and there was published under the same authority in 1909 a bulletin reporting in full a searching study of Rural School Efficiency in Kalamazoo County, which was made by the present writer under the auspices of the Department of Economics and Sociology of the Carnegie Institution of Washington and the Michigan Department of Public Instruction.

The fact that the foregoing materials were at hand and already somewhat familiar is sufficient reason for the areas named being used for the proposed investigation, if no facts of the natural or historical limitations of these areas render them seriously incomparable.

Natural Features

Trumbull County lies well toward the south of the glacial area and has an elevation of from 1100 to 1200 feet. The soil is clay and sand loam, with considerable bottom land which is very fertile. The annual rainfall is [1]44.22 inches (this rainfall is exceptionally great, it was less than 34 inches in 1908) and the temperature ranges from—[1]20 degrees to 97 degrees, with a mean annual temperature of [1]50.7 degrees. The timber is chestnut, poplar, elm, beech, maple, sycamore, and, in the part of the county being studied there was a grove of twenty-five acres of white pine, one of the largest found on the whole Western Reserve.

Kalamazoo County presents a surface of drift formation also, and it lies at an elevation of from 700 to 850 feet. The soil is a little more varied, shading from sand and clay into loams of these in combination with gravel and stone. There is a considerable acreage of prairie and muck soils. The annual rainfall is [2]28.72 inches and the temperature records extremes of [2]–11 degrees and [2]93 degrees, while the mean annual temperature is [2]47.09 degrees. Here, too, there are numerous creeks and many lakes. The timber is oak, hickory, maple, beech, elm, and several of the softer woods.

Historical Statement

A concise and adequate statement of the early political history of "The Connecticut Western Reserve" may be found in Hinsdale's "The Old Northwest," Chapter XIX. The purest New England stock had assembled in the Reserve by 1800, in sufficient numbers to set the machinery of local government in motion. The first quarter session court was held in Trumbull

[1] Figures for Wooster, Ohio, from the annual report of the Agricultural Experiment Station, 1910, p. 655.

[2] Figures from annual report of Agricultural Experiment Station (Lansing), 1910, pp. 189-200.

County in August, 1800, and the first election was held in October, 1800. The best references for the local history are —"Historical Collections of the Mahoning Valley" (1876) and "Historical Collections of Ohio" by Dr. Henry Howe, Ohio Centennial Edition, 1902, in two volumes. These books are full of pioneer reminiscences and anecdotes, in many cases in the exact language of actual participants in the frontier hardships and victories. The family names, the high intellectual and moral standards and the fidelity with which the New England environment was reproduced in so far as was possible, all go to show that the Ohio townships, which are the present subjects of study, grew from seed of the best American selection.

Professor Andrew C. McLaughlin presents, in brief scope, the early political history of Michigan in his monograph on "The Government of Michigan." Cooley's "Michigan," in the American Commonwealths series, is the best reference. Territorial government was organized in 1805, but little progress could be made until after the War of 1812. In 1823, in 1825, and again in 1827, the representative principle was enlarged in the territorial government until, in the last year, the territorial council became wholly elective. This indicates that Michigan's real growth, politically, came after 1820. Statehood came in 1837, twenty-five years after it came to Ohio. Kalamazoo was first settled in 1829-30, Titus Bronson, a Connecticut Yankee, being the pathfinder for the settlement. The first local election was held in April, 1831, and the first court record bears date of October 17, 1831. The best references for the local history of Kalamazoo County are "The Michigan Pioneer Collections" (beginning with Vol. XIV, 1889, the title is "The Michigan Pioneer and Historical Collections") now in thirty-eight volumes, but provided with excellent working index; and a "History of Kalamazoo County" compiled and published by J. M. Thomas in 1869. Early settlers here came from New England, New York, and Ohio. A quotation from the original official plan of the village of Kalamazoo, sets the standards of the settlers pretty definitely:

"One square of sixteen rods for the courthouse; one square of sixteen rods for a jail; one square of sixteen rods for an academy; one square of eight rods for common schools; one square of two acres for public burial grounds; four squares of

eight rods each, for the four first religious denominations that become incorporated in said village agreeably to the statute of the Territory." (Thomas, History of Kalamazoo County, p. 33.)

The gist of the foregoing is that in natural resources, in the stock of settlers, and in institutional ideals, the two localities under consideration have not been notably different except in the one particular that the Ohio community is a generation older. However, there is another significant difference which should be kept in mind. The Ohio area is organized into townships of twenty-five square miles, and the Michigan townships have thirty-six square miles. Since political and geographical boundaries, in a large measure, set the community boundaries and since social gravitation tends to be dissipated by isolation, the likelihood of the community of smaller area acting as a unit is far greater.

It seems that these localities were endowed, in their settlers, with approximately the same high appreciation of education. No doubt, the ability of each community to carry out its educational purposes unaided has varied irregularly with the ups and downs of seasons and markets; but it is probably true that the range of variation has fluctuated about medians of resources not widely different as between the two localities. This being true, it remains only to notice how each locality has fared, relatively, in leadership, organization, and financial aid by the State.

Samuel Lewis became State Superintendent of Common Schools in Ohio in 1837, and for three years devoted himself to the duties of this office with energy, ability, and success comparable to that of Horace Mann in Massachusetts, and of John D. Pierce in Michigan. His three annual reports, together with the report of Calvin E. Stowe in 1837 on European school systems with especial reference to elementary education in Prussia, which was sent to every school district in the state, initially capitalized, intellectually, the public school movement in Ohio.

This same task was well done in Michigan by State Superintendent John D. Pierce (1837-1841) in close co-operation with Hon. Isaac E. Crary, representative of the territory and the state in Congress, and chairman of the Committee on Educa-

tion in the State Constitutional Convention. Both of these men were members of the convention which wrote the second state constitution in 1850, and they were powerful guardians of public education. If this study demanded, or permitted, a detailed record of common school history in the two states under view, many names could be mentioned in connection with the definite advance steps in education to which they have the relation of leadership.

The relative progressiveness of the two states, may be briefly indicated as follows: State normal schools were first officially urged—in Ohio in 1837, in Michigan in 1837, and established in Ohio in 1902 and in Michigan in 1849 (dedicated October, 1852);[1] graded course of study—Cincinnati, Ohio, 1840—Flint, Michigan, 1846; high school—Cleveland, Ohio, 1846; [2]Detroit, Michigan, 1860; teachers' institute—Sandusky, Ohio, 1845—Jackson, Michigan, 1846; city superintendent—Columbus, Ohio, 1847—village of Jonesville, Michigan, 1848; State Teachers Association—Ohio, 1847—Michigan, 1852; educational journal —Ohio, 1851 (passed to private control in 1859)—Michigan, 1854-1862 (published by the State Teachers Association); county supervision—repeatedly urged in Ohio from 1865 to 1875 and since, but not yet established—in Michigan, 1867, repealed 1879, re-established in 1887-1891; course of study for rural schools—in Ohio, not well established—in Michigan, written and recommended by a committee of county school secretaries in 1889, authorized in 1897, now in 9th revised edition (Michigan legislature of 1911, Act 217, gave the State Superintendent of Public Instruction power to dictate the course of study for rural schools); laws for certification of teachers, dreary history in both states, somewhat simplified in Michigan by institutional certification, e.g., by county normal training classes in 43 counties, by four normal schools, by seven colleges and the university; compulsory attendance laws—frequently re-

[1] Full account of dedication, Michigan State Normal School, State Superintendent's Report, 1853, pp. 51-146.

[2] Michigan's branches of the University for secondary instruction, delayed the organization of high schools; and a question about the legality of using public money for instruction beyond the common school, which was not settled until the famous decision favorable to high schools rendered by Judge Cooley in the Kalamazoo Case in 1874, also handicapped the high school movement. More than twenty other towns in Michigan reported high school departments of varying degrees of excellence in 1860.

vised in both states, advanced law in Ohio in 1893—in Michigan, in 1905; temperance instruction law—in Ohio, in 1888—in Michigan, in 1883; women vote to elect officers—in Ohio, in 1894—in Michigan, in 1893; township unit of organization—Ohio, 1890—Michigan, optional law passed in 1909 not yet taken advantage of, though frequently voted upon (voted in three townships in April, 1912); optional free text-book law—in Ohio, in 1894—in Michigan, in 1889; laws for the consolidation of schools—in Ohio, special laws in 1894 and 1896, general laws, 1898 and 1904—in Michigan, for township districts in Northern Peninsula, in 1891, general laws in 1903; graduation from common school—put on legal basis in Ohio, 1890—in Michigan, 1909; townships not having high schools required to pay tuition of common school graduates in high school—in Ohio, 1890—in Michigan, 1909; instruction in agriculture in high schools required—in Ohio, in 1911, being voluntarily introduced in slowly increasing number of high schools in Michigan.

These facts relating the steps each of the states under consideration has taken in its development of public education, reveal several curious differences as to the relative prominence given by neighboring localities to fundamental questions. The facts suggest that there were, in both states, more needs than the attention and resources at command could meet and that such questions as happened from time to time to get most advantageously urged on public attention, were sufficient to exhaust the public initiative for the time being. However, it is clear that progress has come in both states by the same steps, though these steps have not been taken in the same order in each case; and that the present face of education in each state has the same expression of purposed improvement, even though particular features do vary in expressiveness as they have in the past.

Definitions of Terms

Natural and historical perspective is essential to accuracy in the use and understanding of terms, especially if the terms used are definitive of institutional life and growth. The foregoing paragraphs are intended to help the reader to judge for himself what margin of difference he must concede when the same terms are used in the comparative study of some characteristic phases of common school conditions in Ohio and in Michigan.

In order to further greatly increase the probability of weighing truly the qualifying conditions in the two states, three classifications of data have been secured and will be presented before the school data are shown. First will be items of an economic significance chiefly, which have been tabulated at Washington directly from the federal census of 1910; second will be facts showing the collective social activities of the communities studied; and third, information relative to the home, social, educational, religious and industrial life of the families in the areas studied.

The statistics presented are the accumulation of four distinct surveys of the same areas. The census enumerator gathered the financial data; the data of institutional and other collective activities were secured from records and interviews with officials; the family facts were secured by a house to house canvass; and the school data were taken from records and regular and special reports of teachers and school officers. What is proposed, as was stated at the beginning of this chapter, is a searching comparative study of district schools and consolidated schools as agencies of efficient rural education in reference, chiefly, to elementary education. "Consolidated" rather than "centralized" will be used to designate the larger rural schools, since "centralized" suggests a whole township in one school, while "consolidated" means any school of two or more districts combined. However, these two terms are interchangeable as applied to the Ohio consolidated schools here reported.

Presentation and Discussion

The details as to the securing of original items, the errors detected and eliminated as well as mention of possible mistakes not subject to definite detection, the methods of tabulation and comparison in significant relations, useful items which may be obtained by further surveys of the same areas, and the consideration of such criticisms as have arisen during the progress of the study, will all claim attention as the chapters are developed.

In the second chapter, the economic, institutional, and family data will be presented in detail with only explanatory discussion; and Chapter III will present the school details in like setting. These two chapters put the raw materials before the

reader and enable anyone to make such tabulations as are significant to him or suited to a particular purpose. Chapter IV states some constructive interpretations of the school and community data looking toward progress in rural education.

A Further Suggestion

It is not claimed that either of the localities studied is especially typical. The Ohio schools are among the oldest consolidated schools west of the original states, and in the common course of events, may present many features which will be prominent in the typical consolidated school when such a type has emerged. The Michigan district schools doubtless possess many things common to district schools the country over, but they will not show the results of any propaganda in promotion of the special modern ideas which are featured in the relatively few rural schools about which the public is informed.

It should be constantly kept in mind that all sorts of rural schools in most of the earlier settled agricultural regions have worked for many years under the deadening handicap of a decreasing population. The American spirit grows on conquest and gets its best expression where accumulating wealth and concentrated population challenge new and progressive ideas. These ideas get constructive realization in advanced institutional standards; but it must be remembered that many of these new standards are, as yet, false standards and impossible of application in communities characterized by decadence in the number and, in some cases, in the financial abilities of their citizens.

The first farm frontier, which inspired men by its wildness, its natural splendor, and its challenge to physical conquest has, for the most part, passed away. The second farm frontier is only just now becoming identified in the public consciousness. The first was rich in individual satisfactions and easy social adjustments; the second promises to be incomparably richer in intellectual problems and compelling social necessities. Rural life is now somewhere in the wide trough between these two high and noble crests of human progress. This is the fundamental fact to keep in mind in any present study of the facts and institutions of rural life.

CHAPTER II

FINANCIAL, COMMUNITY, AND FAMILY DATA

Division I. Financial Conditions

Census Bureau Tabulations. In seeking to show the relative financial abilities and, in so far as it is thus determined, the likelihood of progressive educational activity of the Ohio and Michigan communities under comparative study, special tabulations of the Thirteenth Federal Census Returns of Agriculture were secured.

In response to an inquiry at the Census Bureau, the following letter was received:

"Replying to your communication of recent date requesting certain tabulations for townships in the State of Michigan and State of Ohio, I have the honor to inform you that the preparation of special tabulations of this character cannot be confided to any one except the clerks of the Census Office, as the rule requires that the schedules shall not be seen except by the sworn employees of this office. We are, however, authorized to make special tabulation when it can be done consistently with the needs of the work, and charge the cost of preparing the same.

"I have had an estimate made of the cost of doing the work and find it will be about $20. Before we can undertake to do the work I must ask you to make a deposit of this sum with the Disbursing Clerk of the Bureau, Mr. George Johannes. This sum will be held by him until the definite cost of making the tabulation has been ascertained and anything over the actual cost will be returned to you, together with the required tables."

The tabulations were promptly made and transmitted with this statement:

"I send you herewith a special tabulation, in typewritten form, of the Thirteenth Census Returns of Agriculture, of Cooper and Richland townships, Michigan, and Gustavus and Kinsman townships, Ohio, which you requested in letter of July 10. The cost of this special tabulation is $15, and as you have deposited $20 with the Disbursing Clerk of the Bureau, $5 of that amount is returned herewith."

There is available by this means an immense accumulation of

information following each decennial census, which is capable of much significant use in local studies. Data which cannot be secured without authority and secrecy may thus be had from the Census Bureau in township totals and at an expense which is a mere bagatelle compared with the cost of a local house to house canvass even if the same facts could be secured for personal or institutional uses by other than legally authorized persons, which is, of course, impossible.

Comparable Units Established. Since, as already pointed out, the Ohio townships have areas of twenty-five square miles and the Michigan township area is thirty-six square miles, the totals for each item in the appended tables are presented as obtained from the Census Bureau, in township totals and, in parallel columns, reduced to percentages or to the common unit of one square mile.

TABLE I

NATIVITY AND TENURE OF FARMERS

SPECIFIED INQUIRIES	TOWNSHIPS HAVING NO VILLAGE				TOWNSHIPS HAVING VILLAGE			
	Michigan Cooper		Ohio Gustavus		Michigan Richland		Ohio Kinsman	
	Total	Per ct.	Total	Per ct.	Total	Per ct.	Total	Per ct.
Native-born Operators....	170	.87	146	.92	152	.88	164	.98
Foreign-born Operators....	25	.13	12	.08	21	.12	4	.02
Owners.....	151[1]	.77	128[2]	.81	124	.72	132[3]	.79
Tenants.....	44	.23	30	.19	49	.28	36	.21

[1] Includes 5 managers; [2] 4 managers; [3] 1 manager.

This table shows that tenantry is on an approximately equal numerical basis in the areas compared and that no very great advantage obtains for either locality in this matter. The foreign-born operators in the Michigan township without a village —[1]Cooper, and the like Ohio township, [1]Gustavus, are .13 and .08, respectively; and in the townships having villages—[2]Rich-

[1] Cooper township, in Michigan, and Gustavus township, in Ohio, are without villages of any considerable size.

[2] Richland township, in Michigan, and Kinsman township, in Ohio, have villages by the same names with a population of 278 and 400 respectively. (See maps in Appendix B.)

land and Kinsman, the percentages are .12 and .02, respectively. The further significant fact appears that the number of foreign-born operators is larger in townships containing no villages. No general conclusion can be drawn, but in these particular areas the more accessible farms near villages are more attractive to native-born operators.

TABLE II

INVESTMENT AND MORTGAGE INDEBTEDNESS

Specified Inquiries	Townships Having No Village				Townships Having Village			
	Michigan Cooper		Ohio Gustavus		Michigan Richland		Ohio Kinsman	
	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.
Value in dollars of all buildings and improvements, but not implements and machinery	1,165,670	32,380	610,995	24,440	1,446,460	40,179	768,590	30,744
Value of all implements and machinery	67,676	1,889	30,051	1,202	50,400	1,400	20,375	815
Amount of mortgage indebtedness, April 15, 1910	122,370	3,399	54,360	2,176	69,260	1,924	65,775	2,631

This table indicates that the farmers in Cooper and Richland (Michigan) have invested much more heavily in improvements and buildings than have the farmers of Gustavus and Kinsman (Ohio). And Table III, following, shows a much heavier expenditure for fertilizers in the Ohio than in the Michigan townships. The mortgage indebtedness is eight and nine per cent of the investment in improvements and machinery, except in Richland, where it is less than five per cent.

Labor and fertilizers, as stimulants to production, are in noticeably disproportionate appreciation in the compared areas. The real significance of the expenditure for labor does not appear in the naked fact of the amount spent. The relative number of adults in the families, the children of working age, and the character of the farming activities, together with other factors not so evident, demand consideration. The fact that Gustavus uses 66 times as much purchased fertilizer per square mile as Cooper uses; and that Kinsman uses 6 times as much per square

TABLE III

EXPENDITURES FOR LABOR AND FERTILIZERS

SPECIFIED INQUIRIES	TOWNSHIPS HAVING NO VILLAGE				TOWNSHIPS HAVING VILLAGE			
	Michigan Cooper		Ohio Gustavus		Michigan Richland		Ohio Kinsman	
	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.
Amount spent in cash in 1909 for farm labor (exclusive of house work)	$19,200	$533	$10,846	$434	$22,795	$633	$14,730	$589
Amount spent in 1909 for manure and fertilizers	68	1.88	3,249	125	355	10	1,561	62

mile as Richland, may be largely explained by the fact that Gustavus and Kinsman have been farmed a generation longer. The difference may turn, however, on an effective campaign by fertilizer sales agents in the Ohio townships. The maximum use of purchased fertilizers will sooner or later be controlled by the law of diminishing returns.

TABLE IV

ANIMALS AND ANIMAL PRODUCTS

SPECIFIED INQUIRIES	TOWNSHIPS HAVING NO VILLAGE				TOWNSHIPS HAVING VILLAGE			
	Michigan Cooper		Ohio Gustavus		Michigan Richland		Ohio Kinsman	
	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.
Receipts from all animals and animal products sold in 1909	$127,308	$3,536	$107,540	$4,302	$153,631	$4,268	$118,341	$4,734
Domestic animals sold alive and slaughtered in 1909	75,938	2,109	43,046	1,722	123,491	3,430	24,483	995
Sold alive	56,326	1,565	39,341	1,574	122,082	3,391	23,039	922
Slaughtered on farms	19,612	545	3,705	148	1,409	39	1,844	74
Wool and mohair (goat hair) shorn in 1909	2,132	59	888	36	7,391	205	236	9
Dairy products in 1909	43,066	1,196	56,111	2,244	13,727	381	81,255	3,250
Fowls and eggs sold in 1909	6,172	171	7,495	300	9,022	251	11,967	479

The noticeable difference here is that the Michigan townships derive the animal products most largely from meat and wool while the Ohio townships have developed the dairy and poultry industries. Cooper is making a rapid advance in dairy products.

TABLE V

GRAIN, VEGETABLE AND FRUIT CROPS

SPECIFIED INQUIRIES	TOWNSHIPS HAVING NO VILLAGE				TOWNSHIPS HAVING VILLAGE			
	Michigan Cooper		Ohio Gustavus		Michigan Richland		Ohio Kinsman	
	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.	Total	Per Sq. Mi.
Value of all crops including vegetables and fruits produced in 1909	$186,335	$5,176	$99,350	$3,576	$234,524	$6,515	$103,533	$4,141

The advantage of the Michigan townships in grain, vegetable and fruit crops lies largely in the staple cereals. Richland is shown by the State census of 1894 to be the banner wheat growing township of Michigan. This high rank in wheat production is directly related to Richland's low per cent of mortgage indebtedness.

DIVISION II. COMMUNITY ACTIVITIES

It may be that much of rural community unity of purpose is lost through the absence of any organ suited to the expression of many of the particular phases of this purpose. This loss can be conjectured in a comparison of communities similar in many ways but unlike in the measure of public expressiveness. The margin of error in such a conjecture is very difficult, if not impossible, of determination. However, such institutions as do exist afford data for comparative studies as far as they go.

Churches and Fraternities. Religious and fraternal organizations are the most usual forms of rural community expression in matters more largely of local volition; and post offices, schools, and libraries are the common expressions of federal and state initiative as modified by local intelligence. The data for schools will be presented fully in the next chapter and this section will deal with the other community expressions. The items presented are as reliable as repeated interviews and correspon-

dence with the officers of the organizations could make them. The census figures offer the key to the relative existing conditions.

In Table VI, following, the abbreviations are: For churches, M. E., Methodist Episcopal; Cong., Congregational; Pres., Presbyterian; Episc., Episcopal; and M. E. Out, means a country church on the Richland circuit; S. S., Sunday School; Sub-Org., sub-organizations; Conf. Stud., Conference Studies; H. S., High School; Sem., Seminary; Age in years, means that the institutions were established the number of years ago stated; and Area refers to the approximate number of square miles from which the church attendance is drawn. For fraternities, F. A. M., K. O. T. M., and I. O. O. F., are Masons, Macabees, and Odd Fellows; and O. E. S., L. O. T. M., and Rebeccas are the women's organizations of the orders already designated; P. of H. are Patrons of Husbandry or Grangers. A modicum of care in reading will reveal the facts presented in this table.

This table shows that the townships lost population from 1890 to 1910 at the rate of 17 per cent in Cooper, 15 per cent in Gustavus, 16 per cent in Richland, and 5 per cent in Kinsman; and a cursory inspection of the table reveals that in such a fundamental institution as the church, a decrease in population continued through several decades mitigates against improved standards of service and efficiency. Kinsman township, which has most nearly maintained itself in population, has the best record as to church membership, Sunday School enrollment, physical equipment and pastors. The low salary for the minister of the Methodist church in Cooper is due to the fact that this church is a part of an outside circuit and it has no resident minister. The exceptional record of Richland in fraternal organizations, is explained in part by an annual public fraternity banquet which is the most significant social event of the year in the township.

TABLE VI

Data of Religious and Fraternal Organizations

Items	Townships Having No Village						Townships Having Village					
	Michigan, Cooper			Ohio, Gustavus			Michigan, Richland			Ohio, Kinsman		
	1910	1900	1890	1910	1900	1890	1910	1900	1890	1910	1900	1890
Population	912	942	1099	767	844	903	954	1023	1135	1259	1248	1331
Per square mile	25	26	30	30	34	36	26	28	31	50	50	53
Church Organizations	M. E.	Cong.		M. E.	Cong.		M. E.	M. E. Out	Pres.	M. E.	Cong. & Pres.	Episc.
Age in years	60	56		80	59		(?) 50	53	80	86	108	48
Membership	20	76		122	102		31	7	100	236	200	13
S. S. Enrollment	30	60		90	156		60	20	100	100	168	
Sub-Org. Members	44	88		25	50		35	0	25	100	149	
Value of Property	$2000	$3000		$2500	$2500		$5000	$2000	$10,000	$8000	$8000	$3000
Annual Maintenance	$225	$800		$500	$610		$961	$200	$900	$1120	$1650	
Ministers								Same				Lay Reader
Age	57 yrs.	72 yrs.		37 yrs.	49 yrs.		58 yrs		67 yrs.	30 yrs.	33 yrs.	
Experience	30 yrs.	35 yrs.		2 yrs.	17 yrs.		30 yrs.		29 yrs	10 yrs.	6 yrs.	
Preparation	Cnf. Stud. & Reading	Sem. & Reading		H. S. & 3 yrs. Cnf. Stud.	Normal & 3 yrs. Sem.		H. S. & College		College & Sem.	College & Sem.	College & Sem.	
Salary	$150	$700		$400	$500		$675		$650	$1000	$1000	
Tenure	1 yr.	1 yr.		2 yrs.	3 yrs.		2 yrs.		6 yrs.	2 yrs.	6 yrs.	
Fraternal Organizations	F.A.M.	O.E.S.	K.O.T.M.	K.O.T.M.	L.O.T.M.	P. of H.	F.A.M.	O.E.S.	K.O.T.M.	F.A.M.	K.O.T.M.	L.O.T.M.
Age in years	48	22	10	7	6	15	45	10	17	48	17	3
Membership	65	80	15	44	12	104	50	70	40	100	50	20
Area	54 mi.	54 mi.	36 mi.	30 mi.	30 mi.	25 mi.	54 mi.	54 mi.	54 mi.	100 mi.	25 mi.	25 mi.
Value of Equipment	$1200	$100	$15	$25	$15	$25	$2250	$50	$150	$500	$50	$10
	P. of H.						I.O.O.F.	Rebecca	P. of H.	I.O.O.F.		
Age in years	1						57	15	1	30		
Membership	32						60	30	100	20		
Area	36 mi.						36 mi.	36 mi.	36 mi.	25 mi.		
Value of Equipment	New							$50		$500		

Post Offices and Libraries. The items regarding post offices, in Table VII, following, were obtained from the several postmasters (Richland was not given by the postmistress), and some of the items are estimates; but the estimates were made by the official best qualified to make them. The small areas covered and the small number of routes in some townships are due to the greater ease of bringing in routes from adjacent towns or villages just outside. The facts about the public and school libraries are matters of record and were furnished by the librarians. The information for the Michigan townships is less reliable for the school libraries since the libraries are more numerous, smaller, and recorded by persons of necessarily less library experience. No record is kept of the circulation of these small libraries. Reference should be had to the more detailed itemization of school libraries in Chapter III, and to Table XVIII and comment later in this chapter.

TABLE VII

POST OFFICES AND LIBRARIES

ITEMS	TOWNSHIPS HAVING NO VILLAGE		TOWNSHIPS HAVING VILLAGE		
	Michigan Cooper	Ohio Gustavus	Michigan Richland		Ohio Kinsman
Post Offices:					
Number	None	1	1		2
Area covered		4 sq. mi.	38 sq. mi.		75 sq. mi.
No. rural routes		0	2		6
Estimated annual mail		60,000 pieces	500,000 pieces		1,000,000 pieces
Libraries:			Ladies	School	
Number	7	1	1	6	1
Size in volumes	711	575	1160	427	1800
Circulation		426	1560		4438
Additions in year	89	56	23	69	500
Periodicals taken		0	0		54
Periodicals used					Month 150

Social Organizations. Aside from the religious and fraternal organizations and their sub-divisions and affiliates, the social groups were not identified by names to any mentionable extent except in Kinsman where there were—"The Tourist Club," "The Bay View Study Club," "The Bona Fida" social club,

and the Kinsman Ball Team; and in Richland, where there was a Library Club of 54 members and a Thimble Club of 20 members. Richland usually has a lecture course, but there was none during the year of this survey. Numerous miscellaneous activities, however, such as home talent plays, farmers' institutes, public fraternity banquets, school commencements, family occasions and neighborhood reunions made, each, its social and educational contribution to the community vitality. Two other activities lend themselves to tabular statement.

TABLE VIII

LECTURE COURSES AND FAIRS

ITEMS	TOWNSHIPS HAVING NO VILLAGE		TOWNSHIPS HAVING VILLAGE	
	Michigan Cooper	Ohio Gustavus	Michigan Richland	Ohio Kinsman
Lecture Courses:				
No. of entertainments....		5		5
Total cost.....		$210		$325
Fairs:				
Name.....		Grange		Kinsman
Date.....		October		August
Attendance.....		200		20,000
Receipts.....		$30		$3500
Expenditures.....		$20		$3500

Nearness to a city is, no doubt, a determining factor in the too evident lethargy of the Michigan townships in the foregoing respects. The Interstate Fair, in Kalamazoo, is within comfortable driving distance of both Cooper and Richland and the proximity of Cooper, also, to the considerable village of Plainwell and Richland's own village life and accessible city affiliations tend to reduce local initiative.

Co-operation. Co-operative activity in business, outside of the Patrons of Husbandry, was very local and inconsiderable. Two business organizations of a co-operative nature and of noteworthy size and success were found. The Farmers' Telephone Association of Gustavus had 66 members and after six years of satisfactory service was in excellent condition. The Dairyman's

Milk Company of Cooper has been in successful operation for five years. There are at present 91 stockholders.

In the Ohio townships, the school carryalls and the picnic dinners of all the children together, or in groups, at noon, are clearing centers of social interest and information. It is certain that the consolidated school multiplies in the foregoing respect the social service of the one-room school.

Division III. Family Survey

Method and Scope. The most strenuous part of this investigation was the house to house family survey. The family, not the township nor the semi-public or wholly public organization, is the unit of measure here used. In Gustavus, all families but one were canvassed. The home not visited was closed to visitors by the very serious illness of a member. In Kinsman, twelve families were omitted by reason of absence from home, sickness, and refusal to give time to answer the questions. In Cooper and Richland, all the homes visited were successfully canvassed except in one or two cases where there were refusals to answer particular queries. In these townships only a sufficient number of homes were surveyed to afford a proper basis of comparison with the Ohio townships; but the areas covered exceeded in both cases the areas of the Ohio townships, and all the homes in the surveyed areas were visited.

A straightforward explanation of what was wanted and a courteous request for it, together with the statement of the purpose for which the information was to be used and that in no case would items keep their personal identification, in almost every case secured candid and complete answers to the questions asked. Record was also kept, in each case, of impressions gained by observation at the time of the visit.

Age and Children. The median age of heads of families, as shown in Table IX, is significant as an index of the desertion of the farms by young people. And the close relation of this fact to the large number of homes without children and the additional fact that the median number of children in families having children is only two, is obvious. Thirty-one per cent of the families have no children; 24 per cent have one child; 19 per

cent have two children; 11 per cent have three children; 6 per cent have four children; and 9 per cent have five or more children.

TABLE IX

FAMILY ENUMERATIONS

ITEMS	SUB-ITEMS						
Heads of Families:	Total No.	Men	Women				
Cooper..	192	183	9				
Gustavus..	164	155	9				
Richland..	227	207	20				
Kinsman..	255	232	23				
Age of Heads;	Per Cent Under 30 Years	Per Cent from 30 to 40 yrs.	Per Cent from 40 to 50 yrs.	Per Cent Over 50 Years	Maximum Age in Years	Median Age in Years	
Cooper....	.09	.23	.26	.42	92	47	
Gustavus..	.07	.27	.25	.36	89	48	
Richland..	.11	.20	.23	.46	82	49	
Kinsman..	.09	.24	.22	.45	88	49	
Adults:	Per Cent of Homes Having None	Per Cent of Homes Having One	Per Cent of Homes Having Two	Per Cent of Homes Having Three	Per Cent of Homes Having Four	Per Cent of Homes Having More	Maximum Number in Any Home
Cooper....		.06	.68	.18	.06	.02	6
Gustavus..		.05	.67	.22	.05	.02	5
Richland..		.07	.65	.20	.08	.01	5
Kinsman..		.04	.74	.13	.07	.02	8
Employees:							
Cooper....	.79	.16	.03			.02	5
Gustavus..	.06	.75	.17			.02	4
Richland..	.77	.17	.05			.01	3
Kinsman..	.04	.83	.10			.03	6
Children:							
Cooper....	.42	.20	.16	.09	.06	.07	7
Gustavus..	.15	.30	.24	.14	.07	.10	10
Richland..	.39	.26	.14	.10	.04	.07	7
Kinsman..	.27	.24	.21	.13	.07	.08	10

Distance from School. Table X reads as follows: The distance from school of fifty per cent of the families of Cooper was less than one mile; of 17 per cent of the families, it was more than one mile and less than a mile and one-quarter; of 10 per cent of the families, it was more than a mile and one-quarter and less than a mile and one-half; and so on, concluding with: the maximum distance of families from school was two and one-half miles, and the average distance of the homes of Cooper from the schools of Cooper was nine-tenths of a mile. The tabulation showing distances of homes from their trading point is read in a similar manner.

The significance of travel after it has become mere routine,

as a wasteful consumer of time and energy, is too little appreciated. Distance is the one persistent financial handicap of the country school; and consolidation, as shown in the townships of Gustavus and Kinsman, more than doubles this handicap of distance, a fact which introduces a cost item for transportation, a new item in country school expenditures.

TABLE X

NECESSARY TRAVEL

ITEMS	MILES									
Distance from School of Percentages of Families:	Less than one	1–1¼	1¼–1½	1½–1¾	1¾–2	2–3	3–4	4 and More	Maximum	Average
Cooper	.50	.17	.10	.12½	.06	.05			2½	.9
Gustavus	.23	.06	.01	.09	.02	.26	.25	.09	5	2½
Richland	.65	.12	.05	.10	.02	.05	.01		3	.9
Kinsman	.37	.06	.03	.16	.01	.19	.11	.09	6	2
Distance from Trading Point:	Less than one	1–2	2–3	3–4	4–5	5–6	6–7	7 and More	Maximum	Average
Cooper		.005	.05	.16	.19	.14	.21	.23	10	5.4
Gustavus	.31	.23	.20	.13	.05	.006			5	1.5
Richland	.31	.11	.13	.12	.04	.04	.07	.06	9	3.2
Kinsman	.36	.14	.17	.16	.06	.02			5	1.8

Trading Point. Distance from trading point is somewhat less significant than it was before the establishment of the rural mail and telephone service. However, the annihilation of distance in respect to country trading by telephone and mail is only half accomplished. The present facilities, plus an adequate parcels post regulation, would very largely solve the problem. It seems clearly evident that any antagonistic interests, which may be at present successful in defeating the inauguration of the parcels post, are standing hard by the judgment seat of progress.

School Service. The following table, Table XI, reads that in Cooper township 176 heads of families said that the school service was satisfactory; 16 said it was not; 15 made remarks (unsolicited), and, in so far as the interviewer could give a definite point to these remarks, eight complained of incompetent teachers and one of the distance to the school-house. The numbers opposite the quoted remarks are the numbers which appeared, in the original data, opposite the names of the individuals making the remarks.

TABLE XI

SCHOOL SERVICE

ITEMS	SATISFACTORY?			OBJECTIONS					
Expression of Heads of Families:	Yes	No	Remarks	Incompetent Teachers	Distance	Cost	Vans	Disease	Morals
Cooper	176	16	15	8	1				1
Gustavus	144	11	22			5	5	4	
Richland	183	44	25	15	1				1
Kinsman	215	25	39		2	15	19	1	3

	No.	QUOTED REMARKS
Cooper	97	"Personal objection to teacher."
	35	"Same man holds office of director without re-election."
	134	"No officer elected at last annual school meeting—director, a Dutchman who could scarcely speak English, hires same teacher year after year."
	122	"Prefer central school."
	36	"Teacher allowed boys to insult daughter."
	170	"Irregular time."
	173	"Indifference of people."
	1	"Objects to Catholic teacher."
Gustavus	20	"Very much pleased."
	29	"Very much pleased."
	49	"Great improvement."
	58	"Prof. bosses everything, runs whole school—Board has no backbone."
	89	"Only solution of rural conditions."
	47	"Perfectly."
Richland	24	"Too frequent change."
	51	"Schools should be equal to home."
	63	"Too much one man."
	122	"Cross railroads twice."
	153	"Too much cramming."
	171	"Good. Street behavior better."
	172	"Good."
	179	"Object to curriculum."
	180	"Very unsatisfactory in curriculum."
	183	"General tone is disrespectful."
Kinsman	32	"Too early and late."
	33	"Wastes too much time—distance."
	63	"Too far—no comforts in cold weather."
	200	"Too many renters who get their children hauled free while others have to pay for it."
	215	"Riding, hard on frail children."

Church Situation. Table XII shows that, in Cooper, 44 per cent of the heads of families were members of the church; in Gustavus, 64 per cent were members; in Richland, 51 per cent were members; in Kinsman, 73 per cent were members. Again, Cooper has 47 per cent of its membership in regular attendance; Gustavus has 49 per cent; Richland has 48 per cent; and Kinsman has 67 per cent. The abbreviations used here, and not already explained in connection with Table VI, are: Non, nonmembers; Bapt., Baptist; Disc., Disciples; Luth., Lutheran; Ref., Reformed; Cath., Catholic.

TABLE XII

CHURCH MEMBERSHIP, DISTRIBUTION, AND ACTIVITY

ITEMS	Total		Non.	M. E.	Pres.	Cong.	Bapt.	Epis.	Disc.	Luth.	Ref.	Cath.	Others
Membership:													
Cooper	85	44%	107	18		32	11		2	4	7	7	2
Gustavus	104	64%	58	52	2	29	3		7	1		1	3
Richland	116	51%	111	38	58	2	5	1		6	1	7	2
Kinsman	186	73%	67	76	72	1	7	5	8	4		3	10

	Members						Non-Members					
Attendance:	Regular		Irregular		None		Regular		Irregular		None	
Cooper	40	47%	32		13		9		44		54	18%
Gustavus	51	49%	50		3		1		4		53	32%
Richland	56	48%	22		10		3		38		39	13%
Kinsman	126	67%	58		2		1		5		61	24%
Sunday School Attendance:												
Cooper	29		13		37		16		23		68	
Gustavus	58		34		12		0		1		57	
Richland	53		16		28		14		14		43	
Kinsman	125		33		38		8		3		56	

The importance of the church in country community life is oftentimes out of all proportion to the numerical strength of its membership or the number regularly found in its congregations. Very frequently the church affords the best audience-room in the community and if it is equipped for social service by a kitchen and dining-room adequately furnished, it becomes doubly valuable as a community asset, irrespective of its great primary purpose. Table XII suggests that church work might gain definiteness in attack and in recognition of tangible results, by a co-operative analysis of the congregations and surveys for a few facts about every human inhabitant of the territory tributary to the interested churches.

TABLE XIII

FRATERNITY MEMBERSHIP AND DISTRIBUTION

ITEMS	Total		None	One	Two	Three	Four	More
Membership:								
Cooper	98	51%	94	46	31	17	4	0
Gustavus	79	48%	85	58	13	6	2	0
Richland	107	47%	120	54	30	15	7	1
Kinsman	109	43%	144	67	31	7	3	1

	K.O.T.M.	L.O.T.M.	I.O.O.F.	Rebeccas	F.A.M.	E.S.	M.W. of A.	K. of P.	Elks	G.A.R.	P. of H.	Gleaners	Others
Distribution:													
Cooper	27		5		30	34	8	1	1	2	35	3	17
Gustavus	34	3	4		10		6	3	1	1	47		5
Richland	31	2	23	15	29	20	7	4	4		41	9	13
Kinsman	51	15	15		34	2	15	3	2	8	6		18

Fraternities. The foregoing table reads as follows: Of 192 persons interviewed in Cooper, 98, or 51 per cent, claimed membership in one or more fraternities; 94 had no such membership; 46 belonged to one fraternity only; 31 to two; 17 to three; 4 to four; and none to more than four. In the distribution, Cooper had 27 Maccabees, no Lady Maccabees, 5 Odd Fellows, no Rebeccas, 30 Masons, 34 Eastern Stars, 8 Modern Woodmen of America, one Knight of Pythias, one Elk, two Grand Army men, 35 Grangers, three Gleaners, and 17 belonging to other fraternities not named.

The service of a fraternity to the community in which it is organized may be economical, recreative, and stimulating to the best human impulses; again it may be wasteful, dissipating, and degrading to its membership. To what extent the fraternities recorded in Table XIII fulfill the high purposes which they profess, mere figures can not show. A well officered and loyally

TABLE XIV

INSURANCE DATA

Number Carrying Insurance:	Fire		Life		Both		Neither	
	Total	Per ct.	Total	Per ct.	Total	Per ct.	Total	Per ct.
Cooper	159	.83	71	.37	61	.32	23	.12
Gustavus	126	.77	58	.36	46	.28	25	.15
Richland	190	.84	81	.36	74	.33	30	.13
Kinsman	212	.84	126	.50	113	.44	28	.11

supported fraternity, in a rural community, seems likely to render a large service, since it adds one more center for wholesome associations and thus breaks up part of the still too large fallow field in rural social life.

Insurance and Business. Table XIV and Table XV give some notion of the economic alertness of the farmers in the four townships under survey. Table XIV reads: Of 192 heads of families interviewed in Cooper, 159, or 83 per cent carried fire insurance; 71, or 37 per cent, carried life insurance; 61, or 32 per cent, carried both fire and life insurance; and 23, or 12 per cent, carried neither fire nor life insurance. Table XV, showing the use of the mail for buying or selling, is read in a similar manner.

TABLE XV

BUSINESS USE OF MAIL

Number Using Mail:	Buying		Selling		Both		Neither	
	Total	Per ct.	Total	Per ct.	Total	Per ct.	Total	Per ct.
Cooper	57	.30	10	.05	8	.04	133	.69
Gustavus	98	.60	32	.28	23	.14	57	.34
Richland	69	.30	4	.02	18	.07	141	.62
Kinsman	137	.54	41	.16	35	.14	108	.42

Telephone Service. Table XVI, following, suggests the unexhausted possibilities of telephone service, in the areas being considered, both in the expansion of the service and in its systematic and economical management. Maximum telephone usage, like other phases of progress in country life, advances by the

TABLE XVI

TELEPHONE SERVICE

Telephones:	Number Having None		Number Having One	Number Having Two	Most Frequent Rate	Maximum Rate	Minimum Rate
	Total	Per ct.					
Cooper	82	.43	110	6	$18.00	$18.00	$3.00
Gustavus	40	.24	124	8	15.00	18.00	4.00
Richland	135	.59	90	2	15.00	20.00	6.00
Kinsman	96	.33	159	4	15.00	20.00	4.00

compulsion of necessity and by an honest adjustment of the economic possibilities of the situation.

Personal Affiliations. The items in Table XVII identify, to the extent of location, the most personal and familiar and, no doubt, in the cases of many individuals, the most influential social affiliations of the country homes here represented. The table reads that, in Cooper township, the visiting of 44 per cent of the families was done mostly in the country; 33 per cent of the families visited more in the city; and 23 per cent visited equally in the city and the country. In Gustavus, 2 per cent of the families reported doing no visiting. The items for correspondence are read in the same way.

TABLE XVII

VISITING AND CORRESPONDENCE

	Country Per cent	City Per cent	Equal Per cent	None Per cent
Visiting:				
Cooper	44	33	23	
Gustavus	70	26	2	2
Richland	37	24	38	1
Kinsman	64	24	9	3
Corresponding:				
Cooper	22	36½	42	½
Gustavus	46	47	7	
Richland	20	32	47	1
Kinsman	35½	51	13	½

Home and Public Libraries. The ownership and use of books in farm homes is, possibly, less important since the day of rural free delivery of mail has brought newspapers and various periodicals to easy accessibility. The school libraries and various other forms of public libraries have also reduced the necessity of the ownership of books by farmers. The statistics presented in the following table establish the numerical situation as to books in the farm homes visited. The table reads: In Cooper, 2 per cent of the families reported having no books; 43 per cent reported less than 50 volumes; 26 per cent, between 50 and 100 volumes; 15 per cent, between 100 and 150; 5 per cent, between 150 and 200; 4 per cent, between 200 and 300; 2 per cent, be-

tween 300 and 400; none, between 400 and 500; and 3 per cent reported having 500 and more volumes; the maximum number of volumes owned was 553; and the total number of volumes owned in the farm homes of the township was 13,899. The items for the number of families purchasing books during the year and the number using the books in the public library, are read in a similar manner.

TABLE XVIII

OWNERSHIP AND USE OF BOOKS

ITEMS	SUB-ITEMS										
Home Libraries: Percentage of Homes Having	Not any Books	Less than 50	50 to 100	100 to 150	150 to 200	200 to 300	300 to 400	400 to 500	500 and More	Maxi. No. of Vols.	Total No. of Vols.
Cooper.....	.02	.43	.26	.15	.05	.04	.02		.03	553	13,899
Gustavus...	.07	.37	.26	.13	.05	.06	.03	.01	.02	1000	13,842
Richland...	.02	.36	.21	.15	.08	.10	.04	.01	.03	1000	23,342
[1] Kinsman...	.07	.32	.20	.18	.06	.08	.03	.02	.04	2000	25,912

Percentage Adding Books in Year	None	5 or Less	5–10	10–20	Over 20	Maximum No. of Vols. Purchased	Total No. of Vols. Purchased
Cooper.....	.53	.31	.07	.07	.02	52	552
Gustavus...	.65	.18	.09	.06	.02	23	363
Richland...	.38	.30	.20	.10	.02	30	1072
[2] Kinsman...	.69	.15	.06	.07	.03	50	679

Public Library: Percentage Using Books	None	Less than 5	5–10	10–20	20–50	50 and More	Maxi. No. Used in Home
Cooper.....	.76	.04	.03	.09	.06	.02	52
Gustavus...	.50	.20	.19	.08	.01	.02	150
Richland...	.57	.05	.07	.04	.17	.10	104
[3] Kinsman...	.47	.06	.09	.11	.14	.13	156

[1] 26 gave no estimate; [2] 9 gave no estimate; [3] 15 gave no estimate.

Library Administration. Two facts about the service of these public libraries stand out in the foregoing table. One is the great advantage of the library large enough to have a librarian over the small school library with only incidental administration. Table VII shows that there are 711 volumes in the school libraries of Cooper and 575 volumes in Gustavus, whereas the use of such books is about three times as great in Gustavus. The facility for circulating the books in Gustavus, by use of the school vans, is utilized and there is enough circulation set up to

keep the current flowing; whereas, although the children afford equal facility for getting books from the small school libraries of Cooper out to the homes, the circulation seems to be too feeble to start a noticeable current. It should be further noted that practically all of the 575 volumes of the Gustavus library are different books and all are available for every citizen of the township; while the seven small libraries of Cooper township, with their total of 711 volumes, contain many of the same titles in this total and each citizen has available for his use only the number of books contained in his small district library.

The second noticeable feature of this table is that in Kinsman, where a splendid library has been developed by years of care and where there is general public knowledge of this fact, the heads of families interviewed were most sensitive on the questions about books. An inspection enough in detail to determine what percentage of home-owned books are really worthy of the name, shows, in many homes, a library selected in closer relation to the zeal and success of itinerant book agents than to the value of the book or the interests of the family. However, a few home libraries, looked over somewhat in particular, offered some evidence that present-day means of communication forestall the agent to the extent of introducing a larger factor of premeditation by the prospective purchaser.

Current Publications. In Table XIX, the data relative to newspapers, farm papers, and magazines are very nearly correct. The questions as to the number of state and federal bulletins, though always asked in the same way, i.e., "How many have you received in the past year?" seems to have been answered, in some cases, as if the question were "How many have you read in the past year?" If correct answers to both of these questions could be secured, the suggestion of this study is that a wide margin would appear between the total number of bulletins received and the total number read. The indefiniteness of the answers given in the homes indicates that the whole matter of free bulletins is not yet taken very seriously in the townships canvassed, except in cases of farm specialization and where agricultural intelligence has felt the stimulus of school or extension education bearing directly upon it. The item in regard to "Circulating Reading Matter" was hard to get, be-

cause the words in just that combination were not in the vocabularies of most of the people interviewed, except in Kinsman where there is, in connection with the public library, a well systematized scheme for the circulation of the 54 (see Table VII) periodicals taken.

TABLE XIX

NUMBER AND DISTRIBUTION OF CURRENT PUBLICATIONS TAKEN

ITEMS	Percentage not Taking Any			Maximum No. Taken		Median No. Taken	
Publications of All Kinds:							
Cooper	.03			49		5	
Gustavus	.02			30		6	
Richland	.04			61		5	
Kinsman	.03			30		7	
	None	One	Two	Three	Four	More	Maxi.
Newspapers:							
Cooper	.03	.41	.34	.17	.05		4
Gustavus	.05	.27	.31	.23	.10	.04	8
Richland	.07	.47	.23	.13	.06	.03	6
Kinsman	.03	.15	.23	.18	.17	.14	9
Farm Papers:							
Cooper	.27	.32	.20	.14	.05	.02	6
Gustavus	.28	.33	.25	.08	.02	.04	8
Richland	.36	.33	.16	.09	.03	.03	6
Kinsman	.37	.26	.22	.08	.08	.03	20
Magazines:							
Cooper	.35	.23	.14	.11	.08	.09	8
Gustavus	.36	.20	.14	.10	.06	.14	11
Richland	.29	.37	.12	.11	.04	.07	10
Kinsman	.34	.19	.20	.12	.07	.08	8
State Bulletins:							
Cooper	.70	.04	.03	.03	.05	.15	24
Gustavus	.49	.24	.25	.01	.01		4
Richland	.61	.14	.03	.02	.20		4
Kinsman	.64	.14	.21	.01			3
Fed. Bulletins:							
Cooper	.84	.01	.03	.03	.01	.08	35
Gustavus	.89	.08	.02	.01			3
Richland	.69	.12	.01	.03	.01	.14	24
Kinsman	.92	.07	.01				2
Circulating Reading:							
Cooper	.99		.01				2
Gustavus	.99					.01	5
Richland	1.00						
Kinsman	.88	.02	.01	.01	.01	.07	20

Offices Held. Table XX, following, shows the percentage of farm homes represented in offices of the various organizations of the community. Families in which members hold one or more offices in a local public or semi-public organization will, in all probability, enjoy a more varied social intercourse within the home as well as outside of it. The relation of variety of social interest and social participation to relaxation and recuperation from the daily round of compulsory routine in rural life, is vital to just the extent that it enhances daily joy and multiplies current satisfaction.

TABLE XX

OFFICES IN ORGANIZATIONS

Offices Held by Members of Family:	Per ct. Holding None	Per ct. Holding One	Per ct. Holding Two	Per ct. Holding Three	Per ct. Holding Four	Per ct. Holding More	Maxi. No. in Home
Cooper.....	.77	.14	.02	.03	.01	.03	8
Gustavus.....	.68	.15	.07	.02	.04	.04	7
Richland.....	.71	.16	.05	.05	.01	.02	8
Kinsman.....	.74	.15	.05	.03	.01	.02	9

Conveniences. In Table XXI, the item "Modern Machinery" is comparable between Cooper and Richland and between Gustavus and Kinsman. The survey of the Michigan townships was made after the Ohio townships had been completed and it was found necessary to put much more emphasis on the question of modern conveniences to get at the facts at all adequately. The other six items in this table present a summary of the answers of heads of families to direct inquiries and should be correct for the number of homes visited. The assessed valuation of Cooper township, in 1911, was $585,570, a per capita property of $642; while the assessed valuation of Richland township, in 1911, was $1,078,005, a per capita property of $1130. These figures help to an understanding of the advantage of Richland in house conveniences. The presence of a village in Richland does not materially affect the comparison as to house conveniences, since there are proportionately as many conveniences in the country as in the village homes. The per capita property of Gustavus township, as based on the levy of

1910, was $672; and the per capita of Kinsman, figured on the same basis, was $737.

TABLE XXI

MODERN CONVENIENCES

Percentage of Homes Having:	Townships Having No Village		Townships Having Village	
	Michigan Cooper	Ohio Gustavus	Michigan Richland	Ohio Kinsman
Modern Machinery	.30	.01	.29	.05
Water in House	.18	.02	.17	.09
Bath-room	.04	.01	.11	.05
Lighting System	.06	.01	.21	.13
Furnace	.08		.12	.01
Steam Heat	.01			.02
Automobiles	.02	.01	.04	.01

Improvements. Table XXII, like the preceding one, offers safe comparisons between Cooper and Richland, and between Gustavus and Kinsman. The Michigan townships were canvassed later and, in the item of simple improvements in progress, the survey was more thorough. Extensive improvements, such as new buildings, were, of course, obvious in both areas and subjects of easy record.

TABLE XXII

CURRENT IMPROVEMENTS

Kind	Townships Having no Village		Townships Having Village	
	Michigan Cooper	Ohio Gustavus	Michigan Richland	Ohio Kinsman
Percentage Making Simple Improvements	.15	.01	.18	.03
Percentage Making Extensive Improvements	.07	.06	.06	.04

Ranking the Homes. Table XXIII presents items having the value of special observation, but not substantiated by very close scrutiny. The advantage of Richland and Kinsman is no doubt partly accounted for by the economic status. As stated under Table XXI, the per capita property in Richland is $1130 *vs.*

$642 in Cooper; and in Kinsman, the assessed valuation, in 1910, was $927,770, a per capita property of $737 *vs.* an assessed valuation of $515,701, a per capita property of $672, in Gustavus.

TABLE XXIII

GENERAL IMPRESSION GIVEN BY PREMISES

RANK	TOWNSHIPS HAVING NO VILLAGE		TOWNSHIPS HAVING VILLAGE	
	Michigan Cooper	Ohio Gustavus	Michigan Richland	Ohio Kinsman
	Per cent	Per cent	Per cent	Per cent
Excellent	9	10	16	28
Good	60	37	49	36
Fair	20	40	24	26
Poor	11	13	11	10

Family Items Distributed. In concluding this chapter, tabulations of a complete distribution of the family items for groups of owners and renters are presented. The first purpose of this distribution is to complete the explanation, by an illustration of this somewhat lengthy family survey; and the second purpose is to afford a basis of comparison, in small numbers, between owners and renters in the particulars under review.

Each group is made up of sixty heads of families. The owners, who appear by number in this tabulation, were selected by taking the first two owners who were interviewed, in each group of thirty throughout the four townships; and likewise, the sixty renters were selected by taking the first two renters in each successive group of thirty heads of families visited in the four townships. To complete the total of sixty desired, the last two or three names in each township were added. Abbreviations are chiefly initials and subject to easy interpretation. Many modern machines and domestic conveniences are not mentioned; only those which seem to mark the present advance line are noted.

In the following tables, it should be understood that heads of families were not asked to make remarks about the school, further than to answer the question "Is your school service satisfactory?" Such remarks as were made, and that are tabu-

lated, were purely voluntary. By social organization, an association for purely social purposes was indicated. The localities under survey make little organized use of leisure. Under current improvements, "Simple" means merely incidental repairs to offset natural wear and tear; and "Extensive" means new buildings, rebuilding, and grading. Where extensive improvements are in progress on rented farms, it is to be understood that such improvements are to be credited to the non-resident owners of these farms, not to the renters.

TABLE XXIV

DISTRIBUTION OF SIXTY OWNERS

Number	Age	Adults	Employees	Children	Distance to School	Distance to Trading Point	Is School Satisfactory?	Remarks About School	Church Membership	Attendance	Sunday School Membership	Attendance	Fraternities	Insurance—a. Fire, b. Life	Social Organizations	Extension Course	Co-operative Organ	Telephones	Cost of Telephone	Number
1	57	3	2	0	1½	Miles 4½	No	Objects to Catholic teacher	Bapt.	Ir	O	O	3	a. b.	0	0	1	1	$18	1
34	64	2	0	0	1½	3	Yes	None	Epis.	O	C	R	0	a.	0	0	0	0		34
61	38	2	1	6	2	9	No	Poor Government	Cong.	Ir	O	O	1	a.	0	0	0	0		61
92	49	1	0	0		7	Yes	None	O	O	C	R	0	a.	0	0	1	0	18	92
121	43	2	2	3		5	Yes	"	Cong.	R	O	R	4	a. b.	0	0	0	0		121
154	22	2	0	0		4½	Yes	"	Cath.	R	O	R	0	a.	0	0	0	0		154
181	33	2	0	2		3½	Yes	"	Cath.	R	O	R	0	a.	0	0	1	0		181
1	44	2	1	1		2½	Yes	"	M. E.	R	M	R	2	a. b.	0	0	0	0		1
31	42	2	1	3		2	Yes	"	M. E.	R	M	R	1	a.	0	0	2	1	16	31
61	43	3	2	3		1½	Yes	"	M. E.	R	M	R	1	a.	0	0	1	1	4	61
91	31	2	1	5		1	Yes	"	Bapt.	R	M	R	2	a.	0	0	0	0	6	91
122	54	2	1	1		1	Yes	"	O	Ir	M	R	0	a.	0	0	1	0		122
151	65	3	2	2		½	Yes	"	O	O	M	O	1	a.	0	0	0	0		151
2	55	4	2	0		5	Yes	"	O	O	M	R	0	a.	0	0	0	0		2
33	52	2	0	3		6½	No	"	M. E.	R	M	O	1	a.	0	0	1	0	15	33
61	35	2	0	3		3½	Yes	"	O	Ir	O	Ir	0	0	0	0	0	0		61
91	31	2	0	1		3	Yes	"	Luth.	O	M	O	0	a.	0	0	0	0		91
121	27	2	1	0		2½	Yes	"	O	Ir	P.	R	2	a. b.	0	0	1	0	20	121
151	68	2	1	1		1	Yes	"	Pres.	R	M	R	0	a.	0	0	0	0		151
1	57	2	1	1		½	Yes	"	M. E.	R	M	R	1	a.	0	0	0	0		1
31	72	2	1	2		5	Yes	Does not like riding so far	M. E.	R	M	R	0	a.	0	0	1	1	15	31
61	43	2	1	2		3	No	Van drivers unfit; no order at school	M. E.	Ir	M	Ir	1	b.	0	0	0	1	15	61

91	63	4	2	0	1½	1½	Yes	None	Pres.	R	P	R	0	a.	0	0	0	0		91
121	69	2	1	0	1½	1½	Yes	Quite expensive	0	0	0	0	0	a. b.	0	0	0	0		121
151	72	2	1	0	1½	1½	Yes	None	0	0	0	0	0	a.	0	0	0	0		151
2	48	2	0	1	¼	3½	Yes	"	0	0	0	0	3	a. b.	0	1	0	1	18	2
35	92	2	0	0	½	3½	No	No system of business	0	Ir	0	Ir	0	a.	0	0	0	0		35
63	51	3	0	0	1 1/16	8½	Yes	None	Cong.	R	C	Ir	3	a. b.	0	0	1	1	18	63
93	30	2	0	0	1½	6½	Yes	"	0	Ir	0	0	1	a.	0	0	0	1	18	93
122	41	2	1	5	1	6½	No	Prefer central school	Cong.	R	C	R	1	a. b.	0	0	0	1	18	122
156	30	2	0	2	¾	5⅛	Yes	None	0	Ir	Luth.	R	0	a. b.	0	0	0	1	18	156
182	39	2	0	0	⅛	3½	Yes	"	0	0	0	0	0	0	0	0	0	0		182
191	31	2	3	4	1½	3½	Yes	"	Ref.	0	0	0	0	a. b.	0	0	0	1	18	191
192	55	2	4	0	¾	3½	Yes	"	0	0	0	0	1	a.	0	0	0	1	18	192
4	30	2	1	0	⅛	⅛	Yes	"	0	0	0	Ir	0	a.	0	1	0	2	6	4
32	42	2	1	0	3	3	Yes	"	Bapt.	Ir	0	0	1	a.	0	0	0	1	4	32
62	67	3	1	1	⅛	1/16	Yes	"	Cong.	R	C	R	2	a.	0	1	0	1	15	62
93	22	2	1	1	3	2	Yes	"	0	0	0	0	0	0	0	0	0	0		93
123	55	2	1	2	4½	1	Yes	"	0	0	M	R	1	a. b.	0	0	0	1	4	123
153	51	1	0	2	⅛	1/16	Yes	"	Cong.	R	C	R	0	0	0	0	0	0		153
160	32	2	1	1	1	In vil.	Yes	"	0	0	0	0	0	a.	0	0	0	2	16	160
162	57	2	1	0	3½	½	New-comer	"	Frnd.	R	0	0	0	a. b.	0	0	0	1	13	162
3	23	4	0	1	¾	5	Yes	"	Pres.	0	0	0	0	a. b.	0	1	0	1	18	3
35	22	1	0	0	1½	6½	Yes	"	M. E.	R	M	R	0	a.	0	0	0	0		35
62	55	3	0	1	1½	3¾	Yes	"	0	Ir	0	0	2	a. b.	1	1	1	1	20	62
93	46	2	2	3	¼	2	Yes	"	0	Ir	P	R	0	a.	1	1	0	1	15	93
122	34	2	1	2	1½	2½	No	Cross railroads twice	0	Ir	0	0	3	a.	0	1	0	1	15	122
152	43	3	0	2	¼	In vil.	Yes	None	Pres.	R	P	R	2	a. b.	2	1	1	0		152
165	71	1	0	0	⅛	In vil.	Yes	"	Pres.	R	P	0	0	a.	0	0	0	1	20	165
167	72	2	0	0	1/16	¼	Yes	"	M. E.	Ir	M	Ir	0	a.	0	1	0	0		167
168	67	2	0	0	¼	In vil.	Yes	"	Pres.	R	P	R	4	a. b.	1	1	0	1	15	168
2	62	2	0	1	1½	½	No	Too expensive	0	0	0	0	0	a.	0	0	0	0		2
32	56	3	2	2	4	4	No	Riding too early and late	M. E.	R	M	R	0	a.	0	0	0	1	15	32
62	56	2	1	5	4	4	Yes	None	0	0	0	0	0	a.	0	0	0	0		62
93	41	2	1	3	1½	1½	Yes	"	0	0	P	R	1	a.	0	0	0	1	15	93
122	46	2	1	1	2	2	Yes	"	Pres.	R	P	R	0	a. b.	0	0	0	1	15	122
156	68	2	1	0	1¾	1¾	Yes	"	Pres.	R	P	R	0	a.	1	0	0	1	15	156
182	73	2	1	0	⅛	⅛	Yes	Do not like kind of haulers	M. E.	R	M	R	0	a.	0	0	0	0		182
213	35	2	1	3	⅓	⅓	Yes	None	Pres.	R	P	R	2	a. b.	1	1	0	1	15	213
243	50	1	0	2	In vil.	In vil.	Yes	"	M. E.	R	M	R	0	a.	1	0	0	0		243

TABLE XXIV—*Continued*

DISTRIBUTION OF SIXTY OWNERS

Number	Use Mail—a. Buying, b. Selling	Books Owned	Books Purchased Past Year	Library Books Used	Visiting—a. Country, b. City, c. Equal	Corresponding—a. Country, b. City, c. Equal	Publications Taken						Offices in Organizations of all kinds	Special Conveniences a. House; b. Barn	Current Improvements—a. Simple, b. Extensive	General Impression of Whole Premises	Number
							n. Newspapers	m. Magazines	f.p. Farm Papers	s.b. State Bulletins	f.b. Federal Bulletins	c. Circulating Reading					
1	a.	100	6	0	b.	c.	3	1	2	12			1	a. Water; b. Water	0	Good	1
24	0	100	0	0	b.	b.	1	1					0	a. Water	0	Fair	24
61	0	12	1	12	a.	a.	1	2	1	6			0	a. Cream separator	0	Poor	61
92	0	6	0	0	b.	c.	1						0	b. Hay fork	0	Fair	92
121	a.	100	4	9	a.	c.	4		2				0	a. Gas plant; b. Gas engine	b.	Excel.	121
154	0	150	3	0	a.	c.	2		1				0		a.	Good	154
181	0	50	0	0	b.	c.	1	2	3				0		a.	Good	181
1	a.	100	6	8	a.	a.	2		1	3			6		0	Good	1
31	a. b.	350	15	5	a.	a.	2	8		2			3	a. Bath	0	Exc.	31
61	0	25	0	9	a.	a.	1	8	1	1			0		0	Fair	61
91	a. b.	25	0	0	a.	c.	3		2	1			0		0	Good	91
122	a.	40	0	3	a.	a.	2	1					0		0	Fair	122
151	0	50	0	0	a.	a.	3		2	1			0		0	Fair	151
2	0	50	0	0	c.	c.	1						0		0	Good	2
33	0	80	11	7	c.	b.	4	3	1	12	15		3	a. Cream separator	a.	Good	33
61	a.	50	8	15	c.	b.	3	2	1				0	a. Gas plant, fireless cooker	0	Poor	61
91	0	4	0	0	c.	c.	1	2					0		0	Fair	91
121	a.	45	2	0	b.	b.	2	1	3	1			0	a. Vacuum cleaner, furnace	a.	Fair	121
151	0	1000	12	0	b.	b.	1	1	1				0	a. Vacuum cleaner, Gas plant, furnace, bath; b. Storage tank	0	Exc.	151
1	a.	125	0	0	a.	b.	4		1				0		b.	Fair	1
31	0	50	0	0	a.	b	1		4	1			0		0	Fair	31

61	0	75	0	1	a.	a.	4		4	2			0	....	0	Good	61
91	0	100	2	0	0	0	2	1	1				0	....	0	Good	91
121	0	20	0	0	b.	b.	2		1				0	....	0	Fair	121
151	a.	12	0	0	0	a.	3	2	1				0	....	0	Exc.	151
2	a.	200	6	0	e.	b.	3		2	12	1		1	a. Water by gasoline............	0	Fair	2
35	0	500	1	0	b.	b.	3	1	1	3	4		0	....	0	Good	35
63	0	553	15	1	b.	a.	2	6	5	2	6		3	a. Water, gas plant, furnace............	a.	Good	63
93	0	20	0	0	a.	e.	2	1	2	7	5		0	a. Cream separator; b. Spreader............	0	Poor	93
122	0	100	1	0	a.	a.	1	2	3	12			5	a. Cream sep., water; b. Gaso. eng., spread.	a.	Good	122
156	0	6	2	0	b.	b	1	3					1	a. Vacuum cleaner; b Automobile........	b.	Exc.	156
182	0	24	24	0	a.	a.	2						0	....	0	Fair	182
191	0	6	1	0	b.	e.							0	....	0	Poor	191
192	0	75	0	0	b.	e.	1						0	....	0	Poor	192
4	0	56	4	10	b.	b.	2	2				5	1	....	0	Good	4
32	a. b.	36	0	0	a	b.	3	1	2	2			1	....	a.	Good	32
62	a.	100	3	10	b.	b.	4	10		2	1		4	....	0	Good	62
93	a.	1	0	0	e.	e.	1		1				0	....	0	Fair	93
123	a.	250	6	3	a.	b.	3	1	1	2	1		0	....	0	Exc.	123
153	a.	110	0	3	a.	a.	2	1					0	....	0	Fair	153
160	a.	50	0	0	a.	a	2	2	1				0	....	0	Fair	160
162	0	500	0	0	b.	b.	1	5	1				0	....	0	Good	162
3	a.	200	0	5	b.	a.	1	2	1	12			0	....	a.	Good	3
35	0	4	0	0	a.	e.	2	1		4	3		2	....	0	Good	35
62	a.	100	5	25	e.	b.	5	2	2	9	4		0	a. Gas light, vacuum cleaner; b. Water, kerosene engine............	a.	Good	62
93	0	200	15	8	a.	b.	4	5	6	15	20		5	a. Gas light; b. Loader, spreader.........	a.	Good	93
122	0	25	3	4	e.	e.	2		1	12			0	b. Water, loader, spreader............	b.	Good	122
152	0	250	16	20	e.	b.	2		1	12			5	a. Water............	0	Exc.	152
165	0	50	0	0	a.	e.	2	1					0	....	0	Good	165
167	0	30	0	0	a.	a.	3						0	....	a.	Good	167
168	0	800	12	20	b.	e.	6	4	1	6	6		0	a. Gaso. light, portable bath............	a.	Exc.	168
2	0	0	0	0	b.	b.							0	....	0	Good	2
32	a. b.	35	0	12	a	a.	2	4	1	2	1		0	a. Hot and cold water............	0	Exc.	32
62	0	30	0	0	a.	a.	2		1				0	....	0	Fair	62
93	a. b.	42	0	12	a.	b.	3	1	2	2			0	....	0	Good	93
122	0	12	0	10	a.	b.	2	1	1			1	0	....	b.	Exc.	122
156	0	150	0	0	a.	a.	2	3	1	2			0	....	0	Exc.	156
182	0	30	0	0	b.	b.	3	3				1	0	....	0	Good	182
213	0	40	0	0	b.	b.	3	4	1				0	a. Electric light............	0	Good	213
243	a.	15	0	100	a	a.	2	2					1	....	0	Good	243

TABLE XXV

DISTRIBUTION OF SIXTY RENTERS

Number	Age	Adults	Employees	Children	Distance to School	Distance to Trading Point	Is School Satisfactory?	Remarks About School	Church Membership	Attendance	Sunday School Membership	Attendance	Fraternities	Insurance—a. Fire, b. Life	Social Organizations	Extension Course	Co-operative Organization	Telephones	Cost of Telephone	Number
3	30	2	0	2	1½	4½	Yes	None	M. E.	0	0	0	3	a. b.	0	0	0	0	$18	3
31	37	3	1	4	1	2½	No	Poor Government	M. E.	Ir	M	Ir	0	a.	0	0	1	1		31
62	32	2	1	1	1½	5	Yes	None	Spir.	Ir	0	Ir	0	a. b.	0	0	0	0		62
91	44	2	0	4	1	7	Yes	"	0	Ir	0	Ir	0	a.	0	0	0	0	18	91
123	25	2	1	0	1	6½	Yes	"	0	Ir	0	Ir	0	a.	0	0	1	1	18	123
152	37	2	0	1	1	5	Yes	"	0	Ir	0	Ir	0	a.	0	0	0	0		152
180	53	2	1	2	2	3½	Yes	"	Ref.	R	M	R	1	a. b.	0	0	1	1	10	180
2	34	2	1	1	2	1	Yes	"	Luth.	R	0	R	0	a.	0	0	0	0	15	2
43	30	2	1	3	2½	2	Yes	"	0	Ir	C	R	2	a. b.	0	0	1	1		43
68	50	2	1	3	2½	2	Yes	Gives chance for disease to spread	U. B.	Ir	0	R	3	a. b.	0	0	0	0	4	68
92	36	2	1	3	2½	2	Yes	None	0	R	M	R	1	a.	0	0	1	1		92
121	39	2	1	3	3	1	Yes	"	M. E.	R	M	R	0	0	0	0	0	0	16	121
152	43	2	1	3	3	1	Yes	"	M. E.	R	O	R	0	0	0	0	0	0		152
1	54	2	1	0	1	½	Yes	"	0	Ir	B	Ir	0	0	0	0	0	0		1
31	26	2	0	1	2	5	Yes	"	Bapt.	Ir	0	Ir	0	0	0	0	0	0		31
77	65	2	0	1	1	7	Yes	"	M. E.	R	0	R	0	0	0	0	0	0		77
92	31	2	0	1	2	3½	Yes	"	M. E.	Ir	0	Ir	0	0	0	0	0	0	15	92
127	26	2	0	2	1	2	Yes	"	M. E.	Ir	0	Ir	0	0	0	0	0	0		127
155	31	2	0	2	2	3	Yes	"	0	R	0	R	0	0	0	0	0	0		155
3	26	2	0	1	2	1½	Yes	"	Cath.	Ir	M	Ir	2	a.	0	0	0	0		3
35	53	2	0	1	3	3	Yes	"	0	R	0	R	1	a. b.	0	0	1	1	15	35
72	55	2	3	2	2½	2½	Yes	"	M. E.	R	M	R	0	a. b.	0	0	1	1	15	72
	49	2	1	7	2½	2½	Yes	"											10	

92	55	3	1	5	1½	1½	Yes	None	Pres.	R	P	R	1	a. b.	1	0	0	1	15	92
129	36	2	1	2	½	½	Yes	"	M. E.	Ir	P	R	1	b.	0	0	0	1	15	129
161	67	4	2	5	1	1	Yes	"	M. E.	R	M	R	2	a. b.	1	0	0	1	15	161
9	46	2	0	0	¾	5¾	Yes	"	0	Ir	0	0	0	a.	0	0	0	0		9
32	46	3	0	5	½	6½	Yes	"	0	R	Ref.	R	3	a. b.	0	0	0	0		32
66	52	2	0	5	1½	3¾	Yes	"	0	Ir	0	Ir	0	0	0	0	0	0		66
99	42	2	0	6	¾	6¼	Yes	"	Bapt.	R	C	R	0	0	0	0	0	0		99
128	37	2	0	3	1/16	5	Yes	"	Chr.	0	0	0	2	a. b.	0	0	1	1	18	128
153	57	3	0	0	½	4½	Yes	"	M. E.	Ir	0	0	1	a.	0	0	0	1	18	153
173	30	2	0	1	1	6½	No	Indifference of people	0	0	0	0	0	a.	0	0	0	0		173
175	65	2	0	1	1¾	6⅜	Yes	None	0	Ir	0	0	0	0	0	0	0	0		175
178	38	3	0	1	1½	4½	Yes	"	0	Ir	0	Ir	1	b.	0	0	0	1	18	178
3	37	2	1	2	½	½	Yes	"	M. E.	R	M	R	0	b.	0	1	0	1	4	3
45	31	2	1	2	½	½	Yes	"	M. E.	Ir	M	Ir	2	a. b.	0	0	0	1	4	45
72	31	2	1	2	4½	4½	Yes	"	Cong.	Ir	C	Ir	0	0	0	0	0	1	4	72
96	26	2	1	1	2	2	Yes	"	Ref.	Ir	0	0	0	a.	0	0	0	1	4	96
120	62	2	1	10	3½	½	Yes	"	Cong.	Ir	0	0	0	0	0	0	0	0		120
149	42	2	1	1	1/12	1/12	Yes	"	M. E.	R	M	R	0	a. b.	0	0	0	1	4	149
163	25	2	1	1	3½	½	New-comer	"	Cong.	Ir	M	R	1	b.	0	0	0	0		163
164	22	2	1	1	½	⅛	Yes	"	0	0	0	0	0	0	0	0	0	0		164
15	38	2	0	4	½	6	No	General dissatisfaction	0	Ir	M	0	0	a.	0	0	0	0		15
32	44	3	1	2	½	7	Yes	None	M. E.	R	M	R	1	a. b.	0	0	0	0		32
80	22	2	0	0	1½	3	Yes	"	M. E.	Ir	0	0	0	0	0	0	0	0		80
97	35	2	0	4	½	½	Yes	"	0	Ir	P	R	0	0	0	0	0	0		97
129	55	2	0	0	½	2½	Yes	"	0	0	0	0	0	a.	0	0	0	0		129
157	68	3	0	0	1/16	½	Yes	"	Pres.	R	P	R	0	a.	0	0	0	0		157
159	37	2	0	2	½	½	Yes	"	Pres.	R	P	R	0	0	0	0	0	0		159
160	23	2	0	0	½	¼	Yes	"	Pres.	R	P	Ir	0	0	0	0	0	0		160
166	37	1	1	0	⅜	In vil.	Yes	"	0	0	0	0	1	a.	0	0	0	0		166
7	35	2	1	3	1	⅜	Yes	"	M. E.	R	M	R	0	0	0	0	0	0		7
38	58	2	1	7	2¾	2¾	New-comer	"	Chr.	Ir	0	0	0	0	0	0	0	0		38
75	24	2	1	0	3½	3½	Yes	"	0	0	0	0	1	0	0	0	0	0		75
96	43	3	2	1	2½	2½	Yes	"	0	0	0	0	0	0	0	0	0	0		96
130	27	2	1	0	½	½	Yes	"	Bapt.	Ir	0	0	0	0	0	0	0	0		130
174	43	2	1	1	¾	½	Yes	"	0	0	M	R	0	0	0	0	0	0		174
203	56	2	1	0	In vil.	In vil.	Does not know	"	M. E.	R	0	0	1	a. b.	0	0	0	1	15	203
227	24	2	1	0	In vil.	In vil.	Yes	"	Episc	Ir	0	0	3	a.	1	0	0	0		227
233	38	2	1	1	In vil.	In vil.	Yes	"	0	0	0	0	2	0	0	0	0	0		233

TABLE XXV—*Continued*

DISTRIBUTION OF SIXTY RENTERS

Number	Use Mail a. Buying, b. Selling	Books Owned	Books Purchased Past Year	Library Books Used	Visiting—a. Country, b. City, c. Equal	Corresponding—a. Country, b. City, c. Equal	Publications Taken: n. Newspapers	m. Magazines	f.p. Farm Papers	s.b. State Bulletins	f.b. Federal Bulletins	c. Circulating Reading	Offices in Organizations of all kinds	Special Conveniences a. House; b. Barn	Current Improvements— a. Simple, b. Extensive	General Impression of Whole Premises	Number
3	a.	40	2	0	c.	d.	1	4	3				0		o	Fair	3
31	o	28	0	0	b.	d.	1	1	2				0		o	Poor	31
62	a.	25	0	0	b.	d.	2	1	2				0	a. Cream separator	o	Fair	62
91	o	12	6	0	b.	d.	1	1					0		o	Fair	91
123	o	50	3	0	b.	d.	2	1	1				0	a. Gas plant	o	Good	123
152	o	150	0	0	b.	d.	1	4	4	2			0		o	Good	152
180	o	50	3	0	b.	d.	5	3					1		o	Fair	180
2	a.	319	23	10	a.	d.	3	1	1				0		o	Good	2
43	a.	200	7	11	a.	d.	4	3	3				0		o	Good	43
68	a.	12	4	0	a.	d.	2						0		o	Fair	68
92	a.	0	0	0	a.	d.	4	1					0		o	Fair	92
121	a.	150	0	0	a.	d.	1						0		o	Good	121
152	a.	25	1	0	a.	d.	1						0		o	Poor	152
1	a.	12	0	0	a.	d.							0		o	Poor	1
31	o	35	1	0	a.	d.	1	1	3		12		0	b. Engine	o	Good	31
77	o	15	0	0	a.	d.							0		o	Poor	77
92	o	100	6	30	a.	d.	1	2	3	8	5		3	a. Water	o	Good	92
127	a.	30	5	0	a.	d.	4	1	2	12			0	a. Cream separator; b. Gasoline engine	b.	Good	127
155	o	0	0	0	a.	d.	1	1					0		o	Good	155
3	a.	50	12	7	a.	d.	4	1	1	1			1		o	Fair	3
35	o	7	0	0	a.	d.	1	1					0		o	Poor	35
72	o	50	10	6	a.	d.	2	1	1				0		o	Fair	72

92	0	500	25	52	a.	b.	4	8		2		1	0	a. Furnace; b. Gasoline engine..........	0	Exc.	92
129	0		1	25	a.	e.	3		1				0	....	0	Fair	129
161	a.	100	1	20	b.	b.	5	6	2	1			1	—.......................................	0	Good	161
9	a.	75	0	0	b.	e.	1	1	1				0	....	0	Poor	9
32	0	20	5	0	a.	e.	1	1	2				0	a. Cream separator; b. Spreader.........	b.	Fair	32
66	0	14	0	0	a.	a.							0	a. Cream separator.....................	0	Poor	66
99	a.	61	5	25	a.	b.	2						0	....	0	Poor	99
128	a.	50	12	15	a.	a.	2	4	1				0	....	a.	Good	128
153	0	80	3	0	a.	e.	1		1				0	....	0	Good	153
173	0	12	0	0	a.	a.	3	2					0	b. Flowing Water.......................	b	Fair	173
175	a.	12	0	0	e.	e.	1		2				0	a. Cream separator; b. Reservoir tank....	b.	Fair	175
178	a. b.	5	0	0	a.	a.	1	1	1				0	....	b.	Fair	178
3	0	100	15	12	a.	a.	2			1			1	....	0	Good	3
45	a.	48	0	3	a.	a.	3		1				1	....	0	Fair	45
72	a.	0	0	3	a.	e.	2		1				0	....	0	Poor	72
96	0	0	0	0	b.	b.			1				0	....	0	Good	96
120	0	50	0	3	a.	a.	3						0	....	0	Poor	120
149	a. b.	24	12	4	a	a.	1	1	1				0	....	0	Poor	149
163	a.	100	15	0	b.	b.	1	4	1				0	....	0	Good	163
164	a.	18	0	0	a.	a.	1						0	....	0	Poor	164
15	a.	50	7	0	e.	b.	3	3	3				0	a. Cream sep., fireless cooker; b. Water...	0	Good	15
32	a.	100	0	0	b.	e.	3	4	3				0	b. Gas engine..........................	0	Good	32
80	0	50	8	15	e.	e.							0	a. Cream separator; b. Loader, spreader..	a.	Fair	80
97	a.	25	10	1	a.	a.	1						0	....	0	Fair	97
129	0	100	6	0	b.	b.	1	3					0	a. Cream separator; b. Scales...........	0	Exc.	129
157	0	45	0	0	e.	e.	1	1					0	....	0	Fair	157
159	a.	14	0	0	a.	a.	2						0	....	0	Fair	159
160	0	15	0	20	a.	b.	1						0	....	0	Fair	160
166	a. b.	50	12	3	e.	e.	3	9					1	....	0	Exc.	166
7	0		0	0	a.	a.							0	....	0	Fair	7
38	0	10	1	0	b.	b.	1	1					0	....	0	Poor	38
75	a.	0	0	0	a.	a.	1						0	....	0	Poor	75
96	a.	5	0	0	a.	a.	2	1	1				0	....	0	Poor	96
130	a.	7	0	0	a.	a.		3					0	....	0	Fair	130
174	a.		0	36	a.	b.	2		1				1	....	0	Fair	174
203	a. b.	60	12	6	a.	b.	5	6					0	a. Bath................................	0	Good	203
227	a. b.	100	50	0	b.	b.	Pri	nter					0	a. Electric light......................	0	Good	227
233	0	12	0	0	b.	b.	2	3					1	a. Water system........................	0	Fair	233

Distributions Summarized. The foregoing tables present in detail the facts about two random samplings of owners and renters. Table XXVI presents the summaries of these facts, in so far as the several items lend themselves to significant statement in summary.

TABLE XXVI

RELATIVE FACTS ABOUT OWNERS AND RENTERS SUMMARIZED

ITEMS	OWNERS	RENTERS	ITEMS	OWNERS	RENTERS
Median age of heads of families	49	38	Median No. books owned	50	45
Median No. adults in homes	2	2	Median No. books purchased past year	6	7
No. homes without children	58%	33%	Homes making use of library	40%	43%
Median No. children	1	1	Median No. Library books used	9	10
Median distance from school	1½ mi.	½ mi.	Visiting mostly in country	50%	63%
Median distance from trading point	2½ mi.	2½ mi.	Visiting mostly in city	31%	20%
No. dissatisfied with school	15%	5%	Corresponding mostly in country	30%	36%
Homes represented in church membership	60%	60%	Corresponding mostly in city	43%	36%
Homes represented in church attendance	68%	71%	Median No. newspapers taken	2	2
Homes represented in Sunday school membership	55%	43%	No. taking magazines	65%	56%
Homes represented in Sunday school attendance	56%	48%	Median No. magazines	2	2
Homes represented in fraternities	43%	38%	No. taking farm papers	60%	43%
No. carrying no insurance	8%	38%	Median No. farm papers	1	1
No. carrying fire ins. only	55%	25%	No. taking government bulletins	70%	16%
No. carrying life ins. only	1%	15%	Median No. bulletins	6	4
No. carrying both	35%	21%	No. taking circulating reading	5%	1%
Homes represented in social organizations	10%	5%	Homes represented in offices of various organizations	26%	15%
Homes represented in some extension course	20%	3%	Homes having modern conveniences	36%	23%
Homes represented in co-operative organizations	10%	1%	No. making improvements: a. Simple (repairs)	20%	6%
Homes without telephone service	43%	63%	b. Extensive (building)	8%	8%
Median cost of telephone	$15	$15	Median general impression	Good	Fair
No. using mail for buying or selling produce	37%	53%			

Items of Comparison. In the foregoing table, the first item shows that the median age of the sampling of owners was 49 years; of the sampling of renters, the median age was 38 years. This is very significant in relation to such following facts as: per cent of homes having no children, number dissatisfied with school, the ownership and purchase of books and the use of public libraries, the location of the visiting and correspondence of the families, the reading of current publications, and the number of homes represented in the offices of various organizations. The tenure of renters, a fact not learned by this survey, would no doubt be very useful in explaining some of the par-

ticular differences between owners and renters. To what extent the present owners have been renters; to what extent the present renters have risen from the ranks of farm laborers; and to what extent present renters were already owners in fact and in intention—these items, if learned, would lend much additional significance to what has been presented.

However, since the owners are approximately seventy-seven per cent of the population of the townships surveyed, and are conceded to be much more permanent in their tenure and, by the fact of ownership, are likely to be much more vitally interested in taxation and in the effectiveness of local institutions, it is safe to look to the statistics of owners for the community standards in the items concerning which inquiry was made. In matters such as, for example, the percentage of attendance at church, the use of the mail in buying and selling, and the use of library books, in which the renters had better standards than the owners in these particular localities, it cannot be doubted that the renters prove a spur rather than a handicap in the improvement of personal and community standards.

In concluding this chapter, it may be well to expand the statement of the introduction—that the second chapter will present economic, institutional and family data in detail with only explanatory discussion. This has been the plan and purpose of the chapter; but there has been also the general purpose of establishing a setting, or perspective, for the next chapter which is an inquiry in detail into the significant phases of the existing school situation in the same communities. It has been the function of this chapter to present facts showing:

1. The relative economic resources of the compared areas.
2. The relative standing, at present, of common community activities in the contrasted townships.
3. The relative well-being of the homes in the several localities, together with a differentiation of owners and renters in this respect.

CHAPTER III

SCHOOL STATUS

Available Records

In an attempt to measure the exact school status in detail for the academic year of 1910-1911, recourse was had to the teachers' records on file in the districts, to the proceedings of the annual school meetings, to the reports of the district boards, to the State Departments of Public Instruction, and to personal inspections of physical equipments and interviews with officers, teachers, parents and children.

Personal Co-operation. At least one teacher in each of the districts studied has made a personal contribution of care and time to aid in accumulating the data presented in the following pages. In each of the four Ohio consolidated districts, a resident teacher, who had been for several years familiar with local conditions, was employed; and in Michigan the County Commissioner of Schools was a very generous contributor of everything in his power to make the investigation thorough. The personal part required nearly a month of working early and late in Ohio, and a much longer time in Michigan. Any one who undertakes a work like this will be sufficiently impressed with the very great advantage of " Consolidated " school records.

In none of the localities studied was there sufficiently acute supervision to enforce uniformity or thoroughness in the common records of pupils' attendance and work kept by the teachers. In Ohio, the principal teaches too much and is too little prepared to do much with even the machinery of supervision. In Michigan, the County School Commissioner's services are radiated too far from the county seat; and only by means of concentration, through the focus of some particular phase of school activity, which he may elect to emphasize for the time being, may he hope to make his influence decisively effective in all parts of the county. The splendid records kept by a few

teachers in each locality were obviously due to special endowments of executive ability.

Scope of Divisions. The statistics presented in Division I, relative to the districts, are as accurate as the records in so far as the items are matters of record. Such items as the number of legal voters in the district and the number of women voting, are not shown by the records; and these, together with others of like character, were obtained by asking some person, usually an official who was present at the annual school meeting.

In Division II, relative to teachers, the items were furnished by the teachers themselves in every case; but, since records had not been kept by many as to the number and length of visits to their schoolrooms by outsiders and visits made by themselves to homes and attendance at social functions in their districts, they did not respond with much confidence touching these items. What they did say is presented as a careful estimate made by the teachers.

In Division III, relative to pupils, the items are such as the existing records afford. The conception of each pupil's whole school record, as a unit, has not yet been formulated in the schools here studied. The attempt to establish the educational pedigree of each child on the school census list falls short just to the extent that the records are imperfect in items for which there is pretension of record; and to the extent to which records, at best, are incomplete, i.e., records in which no itemization of the activities of children not in the home school, is attempted.

In Division IV, relating to the general features of the schools' activities, the items were given by the teachers, partially from records, and in part from memory. Some of these items were very crudely presented since they were new and had been of very little concern to many of the teachers.

Division 1. The Districts

Related Groups. The statistics for the districts are presented in related groups in the following tables. The distribution of items in the several small districts of the Michigan townships, with such township summaries as the items permit, will be shown in connection with the most comparable Ohio consolidated

TABLE XXVII

Areas, Valuations and School Properties

Items	Numbers of Districts									Vernon Consolidated School
	Alamo District Schools								Whole Township	Whole Township
	1	1fr	2	3	4	5	5fr	6		
Area of District in Sections..	4½	3¼	5⅜	5 11/16	3 15/16	3	2⅜	3¾	31¾	25
Valuation of District.....	$106,130	$63,030	$119,660	$30,530	$58,790	$42,070	$38,470	$60,560	$519,240	$604,613
Size of School Site in Sq. Rds.	160	160	160	160	162	160	80	173	1215	345
Value of School Property....	$2000	$750	$1000	$350	$1000	$800	$500	$800	$7200	$7000
	Cooper District Schools									Gustavus Consolidated Township
	1	2	2fr	4	5	7	8fr		Whole Township	
Area of District in Sections..	5½	4¾	3⅜	6	2 13/16	3 7/16	3⅜		26¼	25
Valuation of District.....	$89,300	$203,200	$54,560	$82,200	$112,400	$92,500	$180,200		$814,360	$515,701
Size of School Site in Sq. Rds.	160	160	90	160	88	80	130		868	320
Value of School Property....	$1200	$1500	$1000	$1200	$1000	$500	$800		$7200	$4000
	Richland District Schools									Kinsman Consolidated Township
	1	2	3	4fr	5	7fr	8fr	11fr	12fr	Whole Township	
Area of District in Sections..	4¾	4 3/16	3 7/16	3⅜	4 5/32	2 5/16	2⅜	2⅜	2	29 3/32	25
Valuation of District.....	$127,220	$95,690	$109,850	$112,200	$386,090	$47,600	$77,930	$38,520	$167,350	$1,172,450	$927,770
Size of School Site in Sq. Rds.	160	160	80	160	320	120	160	80	160	1400	640
Value of School Property....	$1000	$500	$600	$600	$4600	$500	$350	$400	$1000	$9550	$22,000
	Ross District Schools									Johnston Consolidated Township
	1	2	3	6fr	8fr	9fr	14fr			Whole Township	
Area of District in Sections..	3½	3 7/16	2 3/16	3½	3 1/16	3	4¾			25 7/16	25
Valuation of District.....	$54,700	$42,080	$125,930	$44,190	$101,930	$200,000	$51,920			$620,750	$895,495
Size of School Site in Sq. Rds.	160	160	80	80	80	80	160			800	480
Value of School Property....	$1000	$500	$500	$700	$500	$800	$500			$4500	$5000

township in each of the tables, four townships in each state being presented to afford a sufficient area for comparison. Following these distributed and summarized tables, a table of summaries alone will be presented; and, concluding this division, will be a table presenting such totals, medians, averages, and frequencies for all of the four district school townships in comparison with all four consolidated school townships as it is hoped will be helpful to the reader.

Areas and Valuations. In Table XXVII, the areas, tax valuations and valuations of school properties are shown. This table reads as follows: Districts one, one-fractional, two, three, four, five, five-fractional, and six of Alamo township, had areas of four and one-half sections, 3⅞, 5⅜, $5^{11}/_{16}$, $3^{5}/_{16}$, 3, 2⅜ and 3¾, respectively, making a total of 31⅞ sections; and the area of the Ohio consolidated districts was 25 sections respectively. The reason the district areas in Michigan do not add up to 36 sections, or a complete township, is that fractional districts, i.e., districts partly in one township and partly in another township, are administered in the township in which the school-house stands; so that the school township varies in area from the geographical township. The reading of the other items in this table is readily seen from the reading of the first item.

Cost of Instruction. Table XXVIII presents the tax rate, the per capita cost, the salaries of teachers, and the cash on hand at the end of the year. The noticeably high tax rates and cost of instruction in District Number One, of Alamo, and District Number Five, Richland, are caused by the attempt to provide some high school instruction in these districts, which are village districts. The greatly increased tax rate in the consolidated township districts is due in part to the maintenance of high school instruction, but much more largely to the expense of transporting the children to school. Vernon paid $2,974.41, or a per capita of $16.52, for transportation; Gustavus paid a per capita of $15.13; Kinsman paid a per capita of $13.30; and Johnston paid a per capita of $14.64. These items are not corrected for days lost on holidays, but are approximately correct. The large amount of cash on hand at the end of the year in the Michigan townships is due to the strict division of the school

TABLE XXVIII

Tax Rate, Per Capita Cost, Salaries, and Surplus

Items	Numbers of Districts										Vernon Consolidated School
	Alamo District Schools										
	1	1fr	2	3	4	5	5fr	6		Whole Township	Whole Township
Rate of Voted Tax inc. One-Mill Tax	$.00524	$.00298	$.00196	$.00427	$.00227	$.00218	$.00489	$.00298		Median $.00298	$.0105
Total Cost of Education	1336	422	412	316	601	436	380	418		4322	6917
Per Capita Cost, Based on Enrollment	33	20	21	23	25	12	17	25		22	38
Total Paid in Teachers' Wages	1055	360	356	360	378	360	320	315		3504	2433
Cash on Hand at End of Year	0	298	272	424	594	407	284	311		2591	500
	Cooper District Schools										Gustavus Consolidated Township
	1	2	2fr	4	5	7	8fr			Whole Township	
Rate of Voted Tax. inc. One-Mill Tax	$.00323	$.00159	$.00374	$.00221	$ .001	$ .001	$ .001			Median $.00159	$.010
Total Cost of Education	502	1169	431	360	506	429	566			3962	5858
Per Capita Cost, Based on Enrollment	19	25	13	36	24	21	17			21	32
Total Paid in Teachers' Wages	360	765	315	315	383	315	405			2858	2320
Cash on Hand at End of Year	219	487	232	282	210	184	406			2019	1265
	Richland District Schools										Kinsman Consolidated Township
	1	2	3	4fr	5	7fr	8fr	11fr	12fr	Whole Township	
Rate of Voted Tax inc. One-Mill Tax	$.00375	$ .003	$.00145	$.00222	$.00486	$.00415	$ .001	$.00359	$ .001	Median $ .003	$.009
Total Cost of Education	477	381	358	521	3456	308	451	356	496	6895	10274
Per Capita Cost, Based on Enrollment	30	25	26	26	47	34	20	40	25	34	39
Total Paid in Teachers' Wages	382	280	280	403	1920	276	335	300	360	4536	4195
Cash on Hand at End of Year	424	20	124	10	211	219	104	79	278	1470	1000
	Ross District Schools										Johnston Consolidated Township
	1	2	3	6fr	8fr	9fr	14fr			Whole Township	
Rate of Voted Tax inc. One-Mill Tax	$.00274	$.00456	$.00207	$ .0033	$.00132	$ .0018	$ .0026			Median $ .0026	$.0039
Total Cost of Education	566	407	394	381	332	530	480			2990	6000
Per Capita Cost, Based on Enrollment	31	23	30	25	24	26	14			23	28
Total Paid in Teachers' Wages	360	320	315	292	240	405	360			2292	2400
Cash on Hand at End of Year	271	65	35	131	71	1078	452			2102	Deficit 2500

funds into separate funds for designated purposes only; and to the fact that the needs of these specified purposes and the amounts apportioned to meet these needs are not automatically adjusted.

Library Status. Table XXIX presents the existing conditions as to school libraries in the several district school and consolidated school townships. Five of the thirty-one schools of the district townships have no library; and nine of the twenty-six districts having libraries added no books within the year. Reference to Table VII shows that Richland has a Ladies' Library containing 1160 volumes, to which 23 books were added within the year. The splendid library conditions in Kinsman township are due to the union of the public and school libraries and the devoted care of a voluntary and very competent librarian.

TABLE XXIX

SCHOOL LIBRARIES

ITEMS	NUMBERS OF DISTRICTS										Vernon Consolidated School
	Alamo District Schools										
	1	1 fr	2	3	4	5	5 fr	6		Whole Township	Whole Township
Total Number of Volumes in Library	168	91	26	71	123	75	60	78		692	600
Number of Volumes Added This Year		9	1	1	15	25	10	14		75	80
	Cooper District Schools										Gustavus Consolidated Township
	1	2	2 fr	4	5	7	8 fr			Township	
Total Number of Volumes in Library	71	134	68	300	50	67	21			711	575
Number of Volumes Added This Year	18	14	14			22	21			89	56
	Richland District Schools										Kinsman Consolidated Township
	1	2	3	4 fr	5	7 fr	8 fr	11 f	12 f	Township	
Total Number of Volumes in Library		20		85	111	9	113		89	427	1800
Number of Volumes Added This Year		1		12	51				5	69	500
	Ross District Schools										Johnston Consolidated Township
	1	2	3	6 fr	8 fr	9 fr	14 fr			Township	
Total Number of Volumes in Library	49		4		100	60	135			348	567
Number of Volumes Added This Year						24				24	60

Enrollment and Attendance. Table XXX reads: In Alamo township, the districts had 51, 25, 20, 23, 37, 44, 37, and 26 children of school age respectively, making a total of 263 for the township; and Vernon Consolidated School had a total of 232 children of school age. In Alamo, 196 children were enrolled and 136 were in daily attendance, or 71 per cent of the enrollment. In Vernon, 180 children were enrolled and 125 were in daily attendance, or 69 per cent. For a tabulation of the actual attendance of each pupil, in days, see Table XLIII. The slight discrepancy which appears between the statistics given in Table XXX and those given in Table XLIII, is due to the fact that the figures found in Table XXX were taken from the official reports while those in Table XLIII were obtained from an actual count from the records of each teacher.

TABLE XXX

CENSUS, ENROLLMENT, ATTENDANCE OF PUPILS

ITEMS	NUMBERS OF DISTRICTS									Vernon Consolidated School
	Alamo District Schools									
	1	1 fr	2	3	4	5	5 fr	6	Whole Township	Whole Township
Children of School Age....	51	25	20	23	37	44	37	26	263	232
Total Enrollment.....	41	21	20	14	24	36	22	17	196	180
Average Daily Attendance.	30	15	16	10	16	20	15	14	136	125
Percent. of Attend. Based on Enrollment.....	.73	.71	.80	.71	.66	.55	.68	.82	Med. .71	.69
	Cooper District Schools									Gustavus Consolidated Township
	1	2	2 fr	4	5	7	8 fr		Township	
Children of School Age....	37	47	38	14	25	29	55		245	215
Total Enrollment.....	27	46	34	10	19	20	34		190	181
Average Daily Attendance.	23	30	22	5	12	15	25		132	152
Percent. of Attend.....	.85	.64	.64	.50	.63	.75	.73		Med. .64	.83
	Richland District Schools									Kinsman Consolidated Township
	1	2	3	4 fr	5	7 fr	8 fr	11 f	12 f	Township	
Children of School Age....	21	21	18	22	78	21	31	10	25	247	349
Total Enrollment.....	16	15	14	20	74	9	23	9	20	200	263
Average Daily Attendance.	13	11	8	16	64	5	18	8	9	152	213
Percent. of Attend.....	.81	.73	.60	.80	.86	.61	.78	.89	.45	Med. .78	.80
	Ross District Schools									Johnston Consolidated Township
	1	2	3	6 fr	8 fr	9 fr	14 fr			Township	
Children of School Age....	28	22	19	17	24	40	44			194	245
Total Enrollment.....	18	18	13	15	14	20	34			132	211
Average Daily Attendance.	14	10	10	10	8	18	24			94	184
Percent. of Attend.....	.77	.55	.77	.66	.57	.90	.73			Med. .73	.86

Tenure and Salary. Table XXXI shows the months that school was maintained in each district, the number of different teachers working in each school during the year, and the monthly salaries of teachers. Districts No. 1, Alamo, and No. 2, Cooper, are two-room schools; District No. 5, Richland, is a four-room school. Of the twenty-eight one-room schools, twenty-three kept the same teacher throughout the year; each of the other five one-room district schools made one change in teachers during the year. Thus 82 per cent of the teachers had whole-year tenure. This condition for the same localities in 1881, was 10 per cent. In the four consolidated school townships, but one change occurred in the teaching corps in a year. Where the

TABLE XXXI

SCHOOL YEAR, TEACHERS, AND MONTHLY WAGE

ITEMS	NUMBERS OF DISTRICTS										Vernon Consolidated School
	Alamo District Schools										
	1	1 fr	2	3	4	5	5 fr	6		Whole Township	Whole Township
Number of Months School.	9	9	8.6	9	9	9	8	9		Med. 9	8½
Number of Different Teachers	2	1	2	1	1	1	1	1		10	6
Average Wages Per Month	$72 45	$40	$42	$40	$42	$40	$40	$35		Med. $40	Supt. $95, $40
	Cooper District Schools										Gustavus Consolidated Township
	1	2	2 fr	4	5	7	8 fr			Township	
Number of Months School.	9	9	9	9	9	9	9			Med. 9	8
Number of Different Teachers	1	2	1	1	1	1	1			8	6
Average Wages Per Month.	$40	$50 35	$35	$35	$43	$35	$45			Med. $40	$100, $40
	Richland District Schools										Kinsman Consolidated Township
	1	2	3	4 fr	5	7 fr	8 fr	11 f	12 f	Township	
Number of Months School.	8½	8	8	9	9	8	9	8	9	Med. 8½	9
Number of Different Teachers	1	1	1	2	4	1	2	2	1	15	8
Average Wages Per Month.	$45	$35	$35	$45	$83 45	$35	$36	$37	$40	Med. $40	$95, $52½
	Ross District Schools										Johnston Consolidated Township
	1	2	3	6 fr	8 fr	9 fr	14 fr			Township	
Number of Months School.	9	8	9	8	8	9	9			Med. 9	8
Number of Different Teachers	1	1	1	1	2	1	1			8	6
Average Wages Per Month.	$40	$40	$35	$37	$30	$45	$40			Med. $40	$90, $40

school had more than one room, the salary of the principal is shown without being included in the average wages being paid by the school.

Annual Meeting. In Table XXXII, items are shown in regard to the annual school meeting, which are not matters of record, e.g., the number of legal school voters and the number of women voting. These items are given in every district where an estimate could be obtained from persons considered com-

TABLE XXXII

ATTENDANCE AT ANNUAL SCHOOL MEETING

Items	Numbers of Districts										Vernon Consolidated School
	Alamo District Schools										
	1	1 fr	2	3	4	5	5 fr	6		Whole Township	Whole Township
Number of Legal School Voters	?	72	83	21	27	27	21	14		? 265	210
Number of Voters Attending Annual School Meeting	28	10	15	3	20	10	12	6		104	150
Number of Women Attending	7	2	0	0	0	4	0	0		13	0
	Cooper District Schools										Gustavus Consolidated Township
	1	2	2 fr	4	5	7	8 fr			Township	
Number of Legal School Voters	30	69	20	16	?	13	25			? 173	235
Number of Voters Attending Annual School Meeting	5	25	11	3	14	5	5			68	119
Number of Women Attending	0	0	0	0	4	0	0			4	0
	Richland District Schools										Kinsman Consolidated Township
	1	2	3	4 fr	5	7 fr	8 fr	11 f	12 f	Township	
Number of Legal School Voters	26	25	24	18	89	27	10	14	21	254	218
Number of Voters Attending Annual School Meeting	11	12	4	3	15	17	5	7	6	80	135
Number of Women Attending	5	0	2	0	0	6	0	0	0	13	1
	Ross District Schools										Johnston Consolidated Township
	1	2	3	6 fr	8 fr	9 fr	14 fr			Township	
Number of Legal School Voters	44	23	20	22	20	?	25			? 154	255
Number of Voters Attending Annual School Meeting	10	4	6	12	7	4	10			53	180
Number of Women Attending	0	0	4	0	0	0	4			8	3

petent. Where the estimates could not be secured, question marks are inserted in the table, and also opposite the totals. The percentage of attendance of voters at the annual school meeting is more than twice as great in the consolidated school townships as in the district school townships. In neither locality do the women voters manifest very much interest in voting.

General Summary. The summary of the two types of townships enables the reader to see at a glance the differences which have been shown in particulars in the foregoing tables of this division. In Table XXXIII, the most noticeable contrasts are in the total areas of school sites; the wide divergence in the rates of school tax; the greatly increased cost of education in the consolidated townships, due to transportation and the main-

TABLE XXXIII

SUMMARIZED COMPARISON OF DISTRICT SCHOOL TOWNSHIPS AND CONSOLIDATED SCHOOL TOWNSHIPS

ITEMS	DISTRICT TOWNSHIPS	CONSOLIDATED TOWNSHIPS
Area in Sections	113.3	100
Tax Valuations	$3,126,800	$2,943,579
Sites in Square Rods	4283	1785
Value of School Property	$28,450	$38,000
Rate of Local Tax	$.00254	$.00905
Total Cost of Transportation		$12,034
Per Capita Cost of Transportation		$15
Total Paid in Teachers' Wages	$13,190	$11,348
Annual Cost of Education	$18,169	$29,049
*Per Capita Cost, Based on Enrollment	$23	$34
Cash on Hand at End of Year	$12,182	$2,765 Deficit 2,500
Volumes in Libraries	2178	3486
Volumes Added During Year	257	658
Children of School Age	949	1041
Enrollment	718	835
Average Daily Attendance	514	674
Percentage of Enrollment, Based on Census	.76	.80
Percentage of Attendance, Based on Enrollment	.70	.80
Days of School	177	167
Different Teachers	41	26
Median Wages Per Month (Excl. of Supts.)	$39	$40
Estimated Legal Voters	866	918
Voters at Annual Meeting	305	584
Women Voters at Meeting	38	4

*In determining the per capita cost for the district school townships, District No. 5 Richland, a village district, was eliminated.

tenance of high schools; the better library service in the consolidated schools; the better percentage of enrollment and attendance of the consolidated schools; the longer school year of the district schools; the much better attendance at the annual meeting in the consolidated schools; and the greater, though even at that still very small, attendance of women at the annual meetings in the smaller districts. The facts regarding the Comstock consolidated school, which is the largest school of its type in Michigan, are given in Appendix A.

Division II. The Teachers

The teachers of the schools reported in these pages responded, with very few exceptions, cheerfully, promptly, and as completely as possible, to the twenty-five inquiries addressed to them. Very few teachers failed to understand the importance of giving all the items but several were unable to give some items because they did not have the facts. The data collected are shown in the following tables in their entirety, with only necessary explanations and supplemental statements.

Personal Items. Table XXXIV shows a distribution of the teachers of the several districts in the items of age, sex, and father's occupation. The abbreviations are self-declarative, with the possible exception of "R. F. D.," which means a rural route mail carrier; "Book," which means book-keeper; "Oil," which means an oil producer; and "Liv," which means liveryman. The summaries and further explanatory and supplemental discussion of this and the following tables, which present the information about teachers in detail, will be found preceding Table XLI.

TABLE XXXIV

Age, Sex, and Parentage of Teachers

Items	Numbers of Districts											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Age	20	20	20	21	19	35	21	22	18			
Sex	M	F	M	M	M	F	F	M	F			
Father's Occupation	Agri	Agri	Agri	Agri	R.F.D	Agri	Agri	Agri	Agri			

TABLE XXXIV—*Continued*

Items	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Age	34	20	21	22	23	20						
Sex	M	M	F	F	F	F						
Father's Occupation	Agri	Agri	Agri	Agri	Agri	Merch						
	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Age	20	36	21	19	19	25	20	22				
Sex	F	M	F	F	F	F	F	F				
Father's Occupation	Agri	Agri	Agri	Agri	Agri	Agri	Agri	Agri				
	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Age	34	31	20	32	31	24						
Sex	M	F	F	F	F	F						
Father's Occupation	Agri	Agri	Agri	Agri	Agri	Agri						
	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Age	22	19	21	23	30	33	24	23	40	25	18	20
Sex	F	F	F	F	M	F	F	F	F	F	F	F
Father's Occupation	Agri	Agri	Agri	Agri	Cont	Bldr	Bldr	Agri	Agri	R.R.	Agri	Liv
	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Age	34	24	33	35	20	21	22					
Sex	M	F	F	F	F	F	F					
Father's Occupation	Agri	Lake Capt	Agri	Agri	Agri	Agri	Oil					
	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Age	20	24	24	20	26	21	71					
Sex	M	F	F	F	F	M	M					
Father's Occupation	Agri	Agri	Agri	Agri	Agri	R.F.D	Agri					
	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Age	25	21	19	20	21	22						
Sex	M	F	M	M	F	F						
Father's Occupation	Agri	Book	Agri	Tchr	Agri	Lab						

Educational Qualifications. Table XXXV shows, in the first item, the total years of school attendance by teachers. Nine years means the completion of the 9th grade; 10 years, the 10th grade; 11 years, the 11th grade; 12 years, the 12th grade; and more than 12 years means normal school or college study. A paragraph gives the particulars about the kinds of teachers' certificates in the two states. In the months of normal school instruction, one and one-half indicates attendance at a normal school summer term of six weeks. In District No. 14 Fractional of Ross township, Michigan, an old man is teaching who reports 375 months of experience. This experience has been mostly in one-room schools. The writer knows two other such teachers in a county adjacent to Kalamazoo. In this and in later tables blanks indicate no definite answer. Ciphers indicate a negative answer.

TABLE XXXV

ACADEMIC AND PROFESSIONAL TRAINING OF TEACHERS

ITEMS	NUMBER OF DISTRICTS											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Years of Educational Preparation	14	11	12	11	12	12	11	11	12			
Kind and Grade of Present Certificate	3rd	R	3rd	R	3rd	2nd	2nd	A.R.	3rd			
Mos. Normal Sch. Instr.		20	1½	9	1½	6	12	10½	1½			
Mos. Teaching Exper.	12	18	9	22	9	90	44	16	9			
	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Years of Educational Preparation	14	12	12	14	12	13						
Kind and Grade of Present Certificate	H	H	E	E	E	E						
Mos. Normal Sch. Instr.	6	1		10	1	3						
Mos. Teaching Exper.	109	16	23	23	32	17						
	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Years of Educational Preparation	10	12	12	12	12	12	12	11				
Kind and Grade of Present Certificate	R	2nd	3rd	3rd	3rd	3rd	R	R				
Mos. Normal Sch. Instr.	20	0	3	1½	0	0	27	9				
Mos. Teaching Exper.	18	140	18	9	9	12½	9	12				

TABLE XXXV—*Continued*

Items	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Years of Educational Preparation	15	14	12	12	12	12						
Kind and Grade of Present Certificate	L	H	H	E	E	E						
Mos. Normal Sch. Instr.	8	5	0	0	0	2½						
Mos. Teaching Exper.	124	65	16	42	58	24						

Items	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Years of Educational Preparation	12	12	9	11	14	12	12	12	12	12	12	12
Kind and Grade of Present Certificate	G	3rd	3rd	A.R	1st	2nd	G	2nd	3rd	2nd	A.R.	A.R.
Mos. Normal Sch. Instr.	9	3	12	10	10	5	18	12	18	0	21	19
Mos. Teaching Exper.	26½	13	17	27	87	103½	27	45	210	65½	3½	8

Items	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Years of Educational Preparation	17	16	14	10	12	12	14					
Kind and Grade of Present Certificate	L	H	H	E	E	E	E					
Mos. Normal Sch. Instr.	4			2	3	2	27					
Mos. Teaching Exper.	90	27	120	135	17	25	26					

Items	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Years of Educational Preparation	12	12	12	12	11	12	12					
Kind and Grade of Present Certificate	2nd	2nd	3rd	3rd	2nd	A.R	2nd					
Mos. Normal Sch. Instr.	1½	3	0	3½	3	11½	10					
Mos. Teaching Exper.	18	37	27	31	54	9	375					

Items	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Years of Educational Preparation	16	14	12	10	12	13						
Kind and Grade of Present Certificate	H	H	E	E	E	E						
Mos. Normal Sch. Instr.		27	1½	2	1½	9						
Mos. Teaching Exper.	25	15	16	16	16	24						

Teachers' Certificates. In Michigan, teachers' certificates, granted by the County Board of School Examiners, are designated as First, Second, and Third Grade Certificates. Third Grade certificates are granted to suitable persons who pass an examination in the common school branches; Second Grade certificate examinations include a choice of

two out of four secondary school subjects; and First Grade certificate examinations include five secondary school subjects. The abbreviations "L," "G," "R," "A. R.," in Table XXXV, read Life certificate, Graded School certificate, Rural School certificate, and Advanced Rural School certificate. These certificates are all granted by the Michigan normal schools, and the last three are limited in application and duration. (State of Michigan, General School Laws, 1911, Compilers' Sections 183, 184, 288, 312.)

In Ohio the teachers' certificates, granted by County Boards of School Examiners, are Elementary, High School, and Special, and are indicated, in the table, by "E," "H,' and "S." The first is valid for all branches of study below high school rank; the second is valid for all high school subjects; and the last is valid for schools of all grades, but only for the branch or branches named therein. (Ohio School Laws, 1910, p. 138.)

Current Aids. Table XXXVI shows the use of current professional aids by teachers in service. The teachers are indicated by the schools in which they taught, and, in the schools of more than one room, the particular part of the work that each had is indicated. The direct benefit which close supervision might secure in all of these items in both types of schools, is suggested by the figures in this table.

TABLE XXXVI

CURRENT PROFESSIONAL AIDS USED BY TEACHERS

ITEMS	NUMBERS OF DISTRICTS											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Days attendance at Institutes This Year....		2	2	2	2	2	2	2	1			
Reading Circle Books This Year.....			3	0	0	0	0	3	3			
School Journals Taken This Year.....	1	3	3	0	1	3	2	2	1			
	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Days Attendance at Institutes This Year....	1	7	5	5	7	5						
Reading Circle Books Read This Year.....	½	3	1	0	0	1						
School Journals Taken This Year.....	3	1	2	2	1	4						

TABLE XXXVI—*Continued*

Items	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Days Attendance at Institutes This Year	0	2	2	2	1½	0	2	2				
Reading Circle Books Read This Year	3	3	3	0	3	0	0	3				
School Journals Taken This Year	3	2	2	2	2	2	2	2				
	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Days Attendance at Institutes This Year	5	6	0	5	5	5						
Reading Circle Books Read This Year	4	3	1	4	4	4						
School Journals Taken This Year	5	1	0	2	2	4						
	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Days Attendance at Institutes This Year	0	2	0	0	3	2	2	0	0	1	0	1
Reading Circle Books Read This Year	0	3	0	0	3	0	0	0	0	0	0	1
School Journals Taken This Year	1	2	1	1	2	2	2	2	1	0	1	2
	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Days Attendance at Institutes This Year	12	3	5	5	0	5	0					
Reading Circle Books Read This Year	4	0	0	4	2	1	0					
School Journals Taken This Year	4	0	3	1	1	3	3					
	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Days Attendance at Institutes This Year	3	2	0	1	2	2	2					
Reading Circle Books Read This Year	0	0	0	3	3	0	3					
School Journals Taken This Year	2	1	2	2	2	2	1					
	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Days Attendance at Institutes This Year	4	0	6	5	5	5						
Reading Circle Books Read This Year	2	2	1	4	4	2						
School Journals Taken This Year	2	1	2	1	2	1						

Actual Income. Table XXXVII shows the annual tenure in days, the salary per month, and the larger items of incidental personal expenditure such as, board, room, and travel per month, where such items could be secured from the teachers. The individual teachers are indicated by the numbers of the district schools which they taught and, in the cases of schools of more than one room, the teachers are indicated by the particular positions or grades in which they taught. For example, in Vernon Consolidated School, the teachers are indicated as superintendent and assistant in high school, teacher of 7th and 8th grades, teacher of 5th and 6th grades, teacher of 3rd and 4th grades, and teacher of 1st and 2nd grades.

TABLE XXXVII

EMPLOYMENT AND REMUNERATION OF TEACHERS

ITEMS	NUMBERS OF DISTRICTS											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Days Employed in School This Year	80	180	180	100	180	180	180	160	180			
Wages Per Month	$70	$45	$40	$45	$40	$45	$40	$40	$35			
Cost of Board, Room and Travel Per Month			$15	$15	$13	$20		$20	$14			
	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Days Employed in School This Year	163	163	163	163	163	163						
Wages Per Month	$95	$40	$40	$40	$40	$40						
Cost of Board, Room and Travel Per Month		$13	$15	$15	$13	$20						
	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Days Employed in School This Year	180	180	180	180	180	177	176	180				
Wages Per Month	$40	$50	$35	$35	$35	$42½	$35	$45				
Cost of Board, Room and Travel Per Month	$12		$8	$15	$12			$17				
	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Days Employed in School This Year	157	160	160	160	160	160						
Wages Per Month	$100	$50	$45	$40	$40	$40						
Cost of Board, Room and Travel Per Month			$14									

TABLE XXXVII—*Continued*

Items	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Days Employed in School This Year	170	160	155	180	160	180	180	180	160	180	160	160
Wages Per Month	$45	$35	$35	$35	$35	$50	$40	$40	$35	$40	$38	$40
Cost of Board, Room and Travel Per Month		$12½	$14	$12	$20			$10	$10			

	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Days Employed in School This Year	180	180	180	180	180	180	180					
Wages Per Month	$111	$65	$60	$50	$45	$45	$52½					
Cost of Board, Room and Travel Per Month		$25		$17	$14	$12	$16					

	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Days Employed in School This Year	175	160	180	157	160	180	180					
Wages Per Month	$40	$40	$35	$36½	$30	$45	$40					
Cost of Board, Room and Travel Per Month	$12	$10			$10½	$22						

	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Days Employed in School This Year	160	157	160	160	157	157						
Wages Per Month	$90	$50	$40	$40	$40	$40						
Cost of Board, Room and Travel Per Month			$12	$16	$11							

Official Direction. Table XXXVIII presents the numerical items learned about calls received by teachers from supervising and inspecting officers. In the district schools, the supervisory function of the County Commissioner (or Superintendent) of Schools was performed, in so far as direct contact with the teacher at work was concerned, in all but a few instances, by one annual visit varying in length from 15 to 150 minutes. This is supplemented by correspondence, by telephoning, by circulars and bulletins, and by calls upon the commissioner at his office in the county seat on Saturdays. In the consolidated schools, the superintendent has very little time left for supervision after teaching his classes in the high school. There is a wide variety of practice by different superintendents; a supervisor of superintendents would find work.

TABLE XXXVIII

SUPERVISORY AND OTHER OFFICIAL VISITS RECEIVED BY TEACHERS

ITEMS	NUMBERS OF DISTRICTS											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Visits by the Superintendent	1	1	1	1	1	1	1	1	2			
Ave. Length in Hours.	½	½	2	1	1½	1½	1½	1½	1			
Visits by Officers				3		1						
Ave. Length in Hours.				2		½						
	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Visits by the Superintendent			6	10	8	15						
Ave. Length in Hours.			½	½	½	½						
Visits by Officers						2						
Ave. Length in Hours.						½						
	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Visits by the Superintendent	1	1	1	1	1	1	1	1				
Ave. Length in Hours.	2	2	2	1½	¾	½	¾	1½				
Visits by Officers	1	0	0	1	1	2	2	2				
Ave. Length in Hours.	½			.2	½	2	1	2½				
	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Visits by the Superintendent				32	32	32						
Ave. Length in Hours.				½	½	½						
Visits by Officers	3	3	0	5	2	3						
Ave. Length in Hours.	½	½		1½	½	½						
	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Visits by the Superintendent	1	1	1	2	1	0	0	0	1	1	1	1
Ave. Length in Hours.	1½	1½	2	½	3				2½	1	1½	½
Visits by Officers	5		0	0	6	0	0	0	0	0	0	0
Ave. Length in Hours.	½				½							
	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Visits by the Superintendent				1	1	1	0					
Ave. Length in Hours.				½	½	½						
Visits by Officers												
Ave. Length in Hours.												

TABLE XXXVIII—*Continued*

Items	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Visits by the Superintendent	1	1	1	1	0	1	1					
Ave. Length in Hours	¾	¾	½	½		¾	1					
Visits by Officers	6	0	0	0	2	0	2					
Ave. Length in Hours	2				½		2					
	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Visits by the Superintendent			5	0	0	30						
Ave. Length in Hours			½			½						
Visits by Officers	8	0	1	1	0	0						
Ave. Length in Hours	3		1									

Visits Exchanged. The items presented in Table XXXIX are such as could be secured from the teachers, and the figures were given from memory in almost every case. The larger interchange of visits between homes and schools in the district school townships may be due to several conditions. The teachers of these schools work with smaller groups of children and social conventions are less restrictive in the smaller groups of people; both of which facts aid the teachers in making closer acquaintance and establishing personal ties. There are few homes represented in the school and all are within walking distance, so that a teacher who desires to do so may hope, without too great an expenditure of time and effort, to visit all of her pupils and their parents in their homes. Acquaintance and friendship with the teacher make visiting the school easier for the parents.

TABLE XXXIX

VISITS INTERCHANGED BY HOMES AND TEACHERS

Items	Numbers of Districts											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Visits by Patrons not Officers	10	50	10	23	0	4	13	0	12			
Ave. Length in Hours	1½	2	2	2		1½	3		½			
Number of Homes in District Visited by Teacher	12	20	9	12	8	10	6	5	6			

TABLE XXXIX—*Continued*

Items	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Visits by Patrons		5	10	15	50	50						
Ave. Length in Hours			1	1½	2	2						
Homes Visited		3		6	10	8						
	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Visits by Patrons	31	14	18	1	1	1	1	2				
Ave. Length in Hours	2½	3	3	3	3	2	½	1½				
Homes Visited	8	9	8	6	10	8	8	8				
	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Visits by Patrons	4	4		6	3	10						
Ave. Length in Hours	½	½		1½	1	½						
Homes Visited	83	12	12			12						
	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Visits by Patrons	10	12	4	1	12	20	2	2	3	0	1	2
Ave. Length in Hours	1	3	1	2	½	½	½	2			½	¾
Homes Visited	7	11	5	6	25	10	25	15	6	5	3	9
	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Visits by Patrons			1	2		6						
Ave. Length in Hours			1	2		½						
Homes Visited				5	8	15						
	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Visits by Patrons	4	2		3	6	18	6					
Ave. Length in Hours	2	3		3	1½	1	1					
Homes Visited	2	6	6	5	1	16	6					
	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Visits by Patrons	10	25	12		10	50						
Ave. Length in Hours	3	½	2			2						
Homes Visited	40	10	10		14							

Social Service. The items in Table XL are given as reported by the teachers. The unexhausted possibilities of both the district and the consolidated types of country schools, for both social and entertainment service to the teachers and pupils who

are in them, and to the environing community which supports them, are made obvious by a thoughtful consideration of this table. A tabulation like this suggests the pressing need for a widely published and often reiterated definition of the purposes and activities of the modern public school.

TABLE XL

SOCIAL AND ENTERTAINMENT ACTIVITIES BY TEACHERS

ITEMS	NUMBERS OF DISTRICTS											
	Alamo District Schools											
	1	1	1fr	2	3	4	5	5fr	6			
Social Gatherings in Dis. Attended by Teacher.	6			2	4			3	0			
Social Gatherings Managed by School.....		5		0	0			1	0			
Public Entertainments Given by School.....		3	2	1	0	2	0	0	0			
	Vernon Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Social Gatherings Attended by Teacher...			5	6	5	20						
Social Gatherings Managed by School.....				3	0	2						
Public Entertainments Given by School.....		9	5	7	7	8						
	Cooper District Schools											
	1	2	2	2fr	4	5	7	8fr				
Social Gatherings Attended by Teacher...	5	3	2	4	1	0	2	3				
Social Gatherings Managed by School.....	3	3	2	0	0	0	1	4				
Public Entertainments Given by School.....	2	2	2	0	0	0	2	3				
	Gustavus Consolidated School											
	Supt	Asst	6–7–8		3–4–5	1–2						
Social Gatherings Attended by Teacher...	6		6			10						
Social Gatherings Managed by School.....	4	4	4									
Public Entertainments Given by School.....	8	8		2	1	1						
	Richland District Schools											
	1	2	3	4fr	Supt	Asst	5–6–7	1–4	7fr	8fr	11fr	12fr
Social Gatherings Attended by Teacher...	3	3	0	2	20					0		
Social Gatherings Managed by School.....	1	2	1	3	5					0		
Public Entertainments Given by School.....	0	1	0	0	3	3	2		0	0		1

TABLE XL—*Continued*

Items	Kinsman Consolidated School											
	Supt	Asst	Asst	7–8	5–6	3–4	1–2					
Social Gatherings Attended by Teacher			3	20	9							
Social Gatherings Managed by School			3			3						
Public Entertainments Given by School			1	1	2	1						
	Ross District Schools											
	1	2	3	6fr	8fr	9fr	14fr					
Social Gatherings Attended by Teacher	1	3		3	0	6						
Social Gatherings Managed by School		2		2	0	0						
Public Entertainments Given by School	1	3	2	1	0	0						
	Johnston Consolidated School											
	Supt	Asst	7–8	5–6	3–4	1–2						
Social Gatherings Attended by Teacher	20		5			10						
Social Gatherings Managed by School	10					3						
Public Entertainments Given by School	10		5	12	1	1						

General Summary. The foregoing tables in Division II, relative to teachers, are summarized for all of the teachers in each type of school under consideration, in Table XLI following. The salient facts emphasized in this table are: The advantage rests with the teachers in the consolidated schools to the extent that they are two years older, have had nine-tenths of a year more educational preparation, were two and one-quarter days more in institutes in the current year, have had eight months more experience in teaching, received four dollars per month more pay, had more supervisory visits, attended more social gatherings, and gave more public entertainments; the advantage rests with the teachers of district schools to the extent that they have had three months more (or twice as much) normal school instruction, were employed one-half month longer in school in the current year, paid one dollar a month less for board, room, and travel, had longer supervisory visits and both more and longer visits by school officers and patrons, and themselves visited more homes. And the two groups were approximately equal in the proportional representation of the sexes, in the sig-

nificance of the kinds of certificates held, in the number of school journals taken in the current year, and in the occupations of their parents. In this last item, there was a slight divergence. Of the teachers of district schools, 83 per cent were the children of farmers, while but 80 per cent of the teachers in the consolidated schools were the children of farmers. The remaining one-fifth, or less, were children of parents engaged in various lines of industrial work and one was the child of a teacher.

TABLE XLI

SUMMARY OF RELATIVE FACTS ABOUT TEACHERS OF DISTRICT SCHOOLS AND TEACHERS OF CONSOLIDATED SCHOOLS

ITEMS	DISTRICT SCHOOLS	CONSOLIDATED SCHOOLS
Median Age in Years	22	24
Number of Male Teachers (M); Female (F).	M.,10; F., 25	M., 7; F., 18
Father's Occupation	[1](A)29; (R) 2; (L) 1; (B) 3	(A) 20; (M) 1; (L.C.) 1; (O) 1; (T) 1; (Bk) 1
Median Years of Educational Preparation	12	12.9
Kind and Grade of Present Certificate	[2]1-3%, 2-40%, 3-57%	H-40%; E-60%
Median Months of Normal School Instruction	6	3
Median Days Attendance at Institutes, 1910–11	2	4¼
Median Number Reading Circle Books Read, 1910–11	2	2
Median Number School Journals Taken, 1910–11	2	2
Median Months of Experience in Teaching	21	29
Median Days Employed in School, 1910–11	177	167
Median Wages Per Month, 1910–11	$39	$43
Median Cost Per Month of Board, Room and Travel	$13	$14
Median Number of Visits by Superintendent	1	14
Median Length of His Visits in Hours	1¾	¼
Total Number of Visits by District Officers.	34	28
Median Length of Their Visits in Hours	1½	¾
Visits by Patrons not Officers	289	286
Median Length of Their Visits in Hours	2	1¼
Homes Visited by Teachers	308	271
Social Gatherings Attended by Teachers	78	125
Social Gatherings Managed by Schools	38	38
Public Entertainments Given by Schools	36	80

[1] (A) Agriculture, (R) Mail Carrier, (L) Liveryman, (B) Builder, (M) Merchant, (L.C.) Lake Captain, (T) Teacher, (O) Oil Producer.

[2] Reads: 3% had 1st Grade; 40%, 2nd Grade; 57%, 3rd Grade; 40%, High School; 60%, Elementary School certificates.

See paragraphs after Table XXXV. The Comstock consolidated school, the largest school of its type in Michigan, is summarized in Appendix A.

The writer's personal observation, resulting from actually meeting the teachers and watching them at work, is that below the high school grades there is no appreciable advantage to either type of school in the localities studied, in so far as the teachers are concerned. Occasionally a particular school will give evidence of unusually strong teaching. The constant intermingling of the several teachers in the consolidated schools is an aid in a group dominated by strong teachers and it is a handicap in groups dominated by weak teachers. The undivided responsibility of the teacher in the district school is the determining element in establishing the morale of its situation.

Division III. The Pupils

In collecting the data for children, all whose names appeared in the school census and who had been counted in making the distribution of public school moneys, were taken into account in so far as any traces of them could be found. It is believed by the writer that all citizens who appear in the public record as the recognized wards of the State for educational purposes should be kept in a debtor as well as in a creditor record. That is, every child for whose education money is distributed by the State should be insured the benefits of his share of this state money by the necessary laws.

Necessary Records. These necessary laws are impossible of enactment, except upon mere conjecture, unless there is a reasonably reliable and complete record kept, with official sanction, covering the annual educational activities of each such citizen as is of the age recognized by statute as school age. The facts here presented about children who, by the act of enrollment in some school, gained entrance to the public school records, furnish many indications usable for diagnosis of the school situation, exclusive of those children whose names did not gain admittance to these records.

In the succeeding tabulations of facts, chiefly taken from school records, all children whose names were in the school census for the year under review are counted; and the number for whom practically no significant information was available in the school records of the districts where they held their citizen-

ship is presented as a challenge, at least, for the recognition of the rights of these children as citizens, now very largely ignored by the states except in so far as compulsory attendance laws are indifferently well enforced up to a fixed minimum age or other minimum limit for leaving school.

Age-Grade Distribution. In Table XLII, following, each child whose name appears in the school census of the eight townships being studied is accounted for by age and grade or other status in so far as the records reveal the facts. Following the age and grade distribution of the children enrolled in the home school, the number for each age who are reported as in school elsewhere is shown as well as the number not entered, which is made up of young children who are entering late and of children who came into the school jurisdiction in time to get on the census list but not in time to make it worth while to enter schools just closing for the year. Those enumerated in the table under "Moved, Left," are children whose residence in the district, within the interval covered by this study, was too brief to enable them to become identified with the attendance record, and children who left school upon the completion of specified grades but about whom no other information was obtainable. A distribution of the children enumerated under occupations will be found in a "grades completed" distribution in Table XLIV. The unaccounted for are partly errors in taking the census, partly children who maintain a residence in the district claiming them, but live with grandparents or other relatives elsewhere and probably attend school or work where they live. The percentages of over-ageness for each type of school may be seen and compared at the conclusion of this table. For further comparison of these percentages with the conditions in a city school system of good repute, the percentages of over-ageness in the public schools of Indianapolis for 1908 and for 1911, after the problem had been directly attacked, are shown. (*The Elementary School Teacher,* October 1911, March 1912.) The very few children shown in the table as defective, include only such as were either physically or mentally incapacitated for either school attendance or work.

TABLE

COMPLETE DISTRIBUTION OF CHILDREN ON SCHOOL

DISTRICT SCHOOL TOWNSHIPS

Age	Grades												In school elsewhere	Total in school	Not entered	Defective	Moved Left	In occupations	Unaccounted for	Grand total
	1	2	3	4	5	6	7	8	9	10	11	12								
5	24													24	13					37
6	54	7											1	62	11		2			75
7	29	32	10	1									2	74	1		5		3	83
8	6	24	21	14	3									68			5		2	75
9	2	6	22	25	13	1							3	72	1					73
10		1	7	17	25	5	3	2					1	61			5		4	70
11		1	4	5	25	18	16	4	1				1	75		1	1	1	5	83
12	1	1	2	6	7	12	19	4	1				3	56			3		4	63
13		1		3	2	12	15	27	3				1	64		1	3	1	3	72
14				2	1	2	15	19	3	2			6	50	3		7	5	1	66
15					1		5	14	7	3		1	9	40	2	1	10	9	6	68
16							3	4	5	1	1		12	26	4		13	19	5	67
17			1	1		6		1	2	2			17	30	3	1	19	28	6	87
18								2	2		1	1	4	10	2		8	33	5	58
19					1							1	14	16	4		13	49	6	88
Tot.	116	73	67	74	78	56	76	77	24	8	2	3	74	728	44	4	94	145	50	1065
	.08	.14	.21	.23	.15	.43	.30	.27	..... Percentage of Overage Children in 1st Eight Grades											
	.08	.12	.14	.14	.14	.13	.13	.03	..... Percentage of Overage in Indianapolis in 1908											
	.05	.03	.05	.04	.04	.03	.04	.01	..... Percentage of Overage in Indianapolis in 1911											

Late Entrance. In reading the Age-Grade part of the foregoing table, the first thing to notice is that the census age in Michigan is 5 to 20, and in Ohio, is 6 to 21. This fact explains, in part, the large number of under-age children in the grades of the district schools and the large number of over-age children in the grades of the consolidated schools. The fact that 65 per cent of the six-year-old children in the consolidated districts did not enter, is due to the distance from school and consequent necessarily long day away from home required by attendance at school.

Basis of Calculation. The basis for calculating over-ageness is, as indicated in Table XLII, the use of ages 6 and 7 for the

XLII

CENSUS BY AGE AND GRADE OR OTHER STATUS

CONSOLIDATED SCHOOL TOWNSHIPS

Grand Total	Unaccounted for	In occupations	Moved Left	Defective	Not entered	Total in school	In school elsewhere	Grades 1	2	3	4	5	6	7	8	9	10	11	12	Age
74					48	26		26												6
77			1		5	71		49	19	3										7
59	1		2		3	53		5	32	13	3									8
80	1		1		2	76		2	24	33	15	2								9
62	1		2	1	4	54		1	4	14	22	11	2							10
82			1		4	77		1	1	11	22	27	12	1	2					11
80	1		1		4	74	1		1	3	9	26	20	12	2					12
75					6	69					6	12	15	20	14	2				13
78	2				2	74	1			2	2	7	12	19	20	8	3			14
89	3	8	1		3	74					1	2	9	19	16	18	8	1		15
77	1	8	4		3	61						1	3	6	12	21	9	9		16
79	1	19	6		3	50	2					1	2	2	2	11	9	11	10	17
75	3	41	3	1	2	25	3									4	4	6	8	18
64	4	44	1		1	14	6								1		1		6	19
73	4	61		1		7	7													20
1124	22	181	23	3	90	805	20	84	81	79	80	89	75	79	69	64	34	27	24	Tot.
Per cent Overage in 1st Eight Grades								.11	.37	.38	.50	.55	.55	.58	.45					
Per cent Overage in Indianapolis in 1908								.08	.12	.14	.14	.14	.13	.13	.03					
Per cent Overage in Indianapolis in 1911								.05	.03	.05	.04	.04	.03	.04	.01					

first grade, 7 and 8 for the second, 8 and 9 for the third, 9 and 10 for the fourth, 10 and 11 for the fifth, 11 and 12 for the sixth, 12 and 13 for the seventh, 13 and 14 for the eighth, and continuing thus through the secondary school grades. The late entrance and the frequently interrupted attendance of small children in the consolidated school tend to give the grades a wider range in age, and the bulk of membership in these grades is distributed quite proportionately in numbers to three years, and noticeably in the sixth, seventh, eighth, and ninth grades to four years. In the district schools, over-ageness is greatest in the sixth, seventh, and eighth grades, no doubt due largely to the convenience and value of child labor on the farm, a factor which

should be considered also in connection with the consolidated school.

The fact that ninth, tenth, eleventh, and twelfth grade pupils are shown in the district school townships is accounted for by the presence of the ninth grade in several of the districts, the presence of the tenth grade in the two-room school in Alamo, and the presence of all high school grades in the four-room school in Richland. Including children in school elsewhere, non-resident attendants in available high schools, and a few of the higher ages in colleges, 60 per cent of the fifteen-year-old children of the district schools were in school, 40 per cent of the sixteen-year-olds, 34 per cent of the seventeen-year-olds, 17 per cent of the eighteen-year-olds, and 18 per cent of the nineteen-year-olds. The corresponding figures for the consolidated schools show 79 per cent of the sixteen-year-olds in school, 63 per cent of the seventeen-year-olds, 33 per cent of the eighteen-year-olds, 22 per cent of the nineteen-year-olds, and 10 per cent of the twenty-year-olds. Later entrance in the consolidated schools explains a large part of the apparent difference.

Attendance Distribution. The actual total attendance in days for the year is significant to one who is seeking the causes of over-ageness. Reference to Table XXXIII will show that for the children enrolled the percentage of attendance based on enrollment was .70 in the district schools and .80 in the consolidated schools. Inspection of the same table will show that in spite of the absence of high school grades in most of the district schools, these schools enrolled 76 per cent of their census to 80 per cent of census enrolled by the consolidated schools. These lump percentages do not tell much about the actual details of attendance and, to give this information as well as to offer a further explanation of the large number of over-aged children in the grades, Table XLIII is offered. This table shows a complete distribution, in ten-day groups, of the actual attendance of all the children enrolled in both types of schools.

Striking Contrasts. The striking contrasts in Table XLIII are seen by adding the highest four-day groups, i.e., 140-150 days, 150-160 days, 160-170 days, and 170-180 days, which shows that 57 per cent of the children of district schools had the possibility, by getting sufficient attendance, of completing a

TABLE XLIII

DISTRIBUTION OF ACTUAL ATTENDANCE IN TEN-DAY GROUPS

DISTRICT SCHOOL TOWNSHIPS	DAYS																		Total
	1–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80	80–90	90–100	100–110	110–120	120–130	130–140	140–150	150–160	160–170	170–180	
Alamo		1	7	2	5	4	2		3	12	6	5	11	10	12	15	16	30	141
Cooper	3	4	2	7	6	11	3	1	2	4	6	10	3	6	15	15	37	48	183
Richland	2	2		1	4	3	3	11	1	2	9	10	12	14	15	18	33	38	188
Ross	1	2	3	9	5	4	2	2	1	5	5		5	8	9	15	19	24	119
Total	6	9	12	19	20	22	10	14	7	23	26	25	31	38	51	63	105	140	631
Percentage	.009	.014	.019	.03	.032	.035	.016	.022	.011	.037	.041	.04	.049	.06	.08	.10	.17	.22	
Percentage	.001	.008	.01	.014	.012	.015	.009	.013	.019	.022	.018	.029	.024	.052	.163	.316	.105	.17	
Total	1	6	8	11	9	12	7	10	15	17	14	23	19	41	128	249	83	134	787
Vernon			1	6	1		5	1	1	2	4	1	5	9	23	64	39		162
Gustavus		3		1	3		1	4	2	6	1	9	3	15	51	71			170
Kinsman	1	2	6	1	4	9	1	4	9	3	6	9	4	1	7	12	44	134	257
Johnston		1	1	3	1	3		1	3	6	3	4	7	16	47	102			198
CONSOLIDATED SCHOOL TOWNSHIPS	1–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80	80–90	90–100	100–110	110–120	120–130	130–140	140–150	150–160	160–170	170–180	Total
	DAYS																		

year of work; and that 75 per cent of the children in the consolidated schools were in attendance a sufficient number of days to make possible a year of school work. This is based on the very liberal supposition that a year of public school work can be done in seven months. The other striking contrast is found by adding the lowest six day groups, i.e., 1-10 days, 10-20 days, 20-30 days, 30-40 days, 40-50 days, and 50-60 days, which shows that 14 per cent of the district school children attended school three months or less, and that 6 per cent of the children in consolidated schools attended school three months or less.

Frequent Excuses. An inquiry about the most frequent causes of tardiness and absence, was not answered in a form lending itself readily to tabular statement. The consolidated schools reported but very little tardiness and that was of pupils living near the schools. Where excuses for absence were given, the most frequent causes were work and sickness. In the district schools, tardiness varied very noticeably. Some schools had very little, while in several districts practically every pupil was tardy from one to twelve times and in some cases, individual pupils were credited with 23, 26, 29, 39, and 42 times tardy during the year. The pupil who was tardy 42 times was a boy fifteen years of age and his excuse was work. One school with an enrollment of 15 had four pupils who were each tardy more than 20 times in the year. One family of three children, aged 10, 12, and 13 years respectively, were sent late to school 20 times in the year; and another family sent two young children late to school 33 times in the year. In addition to work and sickness, some district school children offered such excuses as distance, bad roads, chores, and late rising. So far as facts are given, they seem to show that indifference, work and sickness are the chief causes of tardiness and absence in both types of schools.

Non-Attendants. As has already been indicated, the statistics for the consolidated schools are more complete for non-attendants, since the aid of a teacher who had served several years was secured in each of these townships; and these teachers supplied many items from their township acquaintance. This is apparent in the following table, which is a distribution to occupations by grades completed of the number of children re-

ported as engaged in occupations in Table XLII. The totals for each occupation and the median grades completed by children entering each, are given. The fact that the total cases tabulated here is less than the number reported in occupations in Table XLII, is due to the inability to learn what grade several children in occupations had completed, since no record covering these cases was found.

TABLE XLIV

DISTRIBUTION BY GRADES COMPLETED TO OCCUPATIONS

GRADES	HOUSE-KEEPING		FARMING		TEACHING		BUSINESS	
	Dist.	Consol.	Dist.	Consol.	Dist.	Consol.	Dist.	Consol.
Fourth		4		2				
Fifth		4	1	5				6
Sixth	2	2	1	6			1	
Seventh	8	4	11	11			3	
Eighth	10	5	29	17			8	4
Ninth	3	7	11	6	1		1	4
Tenth	3	2	5	6	3	1	1	2
Eleventh		3	2	2	2		1	4
Twelfth		9	1	7	6	13	2	13
Totals	26	40	61	62	12	14	17	33
Median Grades Completed	8	9	8	8	12	12	8	11

DIVISION IV. THE SCHOOLS

Eleven items were sought relating to the organization, activities, and needs of the schools reviewed. The first item asked if the attendance, grade, and credits of each pupil were recorded in the school register. Twenty-four of the thirty district schools and all four of the consolidated schools answered this question in the affirmative. But the records, almost without the exception of a school, showed the urgent need of specific and insistent supervision in the matter of records.

Sample Grade Distributions. The next two items, two and three, asked for the distribution of the pupils by grades and by the number promoted from each grade. Item two is summarized in Table XLII. The following distribution gives an opportunity to compare the number of pupils in each grade in two district schools of each Michigan township with the number

in each grade of each consolidated school. The first two one-room schools of each Michigan township, for which the numbers in each grade were given, will be used in the table.

TABLE XLV

SAMPLE DISTRIBUTION OF GRADE ENROLLMENTS

TOWNSHIPS	GRADES											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Alamo												
Dist. No. 3..	0	0	2	0	2	7	2	1				
Dist. No. 6..	1	2	2	1	3	3	0	3				
Vernon												
Consolidated	13	19	17	19	21	31	11	10	11	5	4	2
Cooper												
Dist. No. 4..	4	2	2	0	1	0	0	1				
Dist. No. 8fr	4	4	1	3	6	3	7	4				
Gustavus												
Consolidated	22	12	14	13	19	12	20	22	16	6	7	4
Richland												
Dist. No. 4fr	1	2	2	1	1	0	3	2	7			
Dist. No. 12fr	0	0	0	1	0	2	2	2				
Kinsman												
Consolidated	27	34	23	26	25	19	24	19	23	18	11	9
Ross												
Dist. No. 6fr	3	1	3	3	0	3	0	1				
Dist. No. 14fr	9	6	5	0	5	0	3	0				
Johnston												
Consolidated	24	15	24	26	23	12	24	16	13	10	6	8

This table shows that the median number of grades in this sampling of district schools is six. Reference to Table XLVI will show that this item, based on a study of thirty schools, is the same—six. A showing of the median number of children in each grade in each type of school is made in Table XLVI. This is also based on a computation of thirty districts. The foregoing table is introduced to make particular and specific the distribution of children by grades in the district schools.

Schedules Explained. The careful reader of Table XLVI will see that the median time given to each grade in the district schools in one day totals more minutes than there are in the school day. This is reduced to a day when corrected to represent six grades, the median number of grades in each school;

TABLE XLVI

Median Time in Minutes, of Recitations by Subjects and Grades

District School Townships									Median Time Given to Subjects in day	Median Time Given to Subjects in day	Consolidated School Townships								
Subjects	Grades										Grades								Subjects
	1st	2nd	3rd	4th	5th	6th	7th	8th			1st	2nd	3rd	4th	5th	6th	7th	8th	
Opening Exercises									15	15									Opening Exercises
Reading	20	20	15	10	10	10	15	15	85	285	105	45	30	30	25	20	20	20	Reading
Arithmetic	10	10	10	15	10	15	15	15	65	220	30	20	25	30	30	30	25	25	Arithmetic
Language, Grammar	10	10	10	10	10	10	10	10	50	155	25	25	15	20	20	20	30	20	Language, Grammar
History							10	15	20	60						20	20	20	History
Geography				10	10	10	10	10	35	120				25	25	25	20	20	Geography
Physiology				10	10	10	10	15	30	75					15	25	20	20	Physiology
Civics								10	10										Civics
Spelling	10	10	10	10	5	10	10	10	35	80	10	10	15	15	10	15	15	15	Spelling
Penmanship									10	15									Penmanship
Drawing									10	15									Drawing
Music			No	inst	ruct	ion													Music
Nature Study and Agriculture									10	20									Nature Study and Agriculture
									Median Number Grades to Each Teacher										
Median Recitation Time Devoted to Each Grade	40	40	45	55	55	60	80	90	6	2	135	80	110	120	135	125	130	130	Median Recitation Time Devoted to Each Grade
									Median Number Children to Each Teacher										
Median Number of Children in Each Grade	3	2	2	2	2	2	3	2	16	40	22	19	22	18	20	17	17	16	Median Number of Children in Each Grade

and making the further correction required by the fact that the general exercises shown as Opening Exercises, Penmanship, Drawing, Music, Agriculture and Nature Study, where all are included, alternate and only one or, at most, two of these are given in any one day. There were also some recitation time schedules which showed alternations of history with civics and geography with physiology as well as in other combinations. The fact that the median time in one day given to each two grades, the number of grades taught by each teacher in the consolidated schools, totals less than the number of minutes in the daily session is accounted for by the uniting of grades for general exercises, and by periods for seat work and study, which are regularly scheduled in the recitation programs. The last items in Table XLVI have been worked out and added to this table as these items are believed to be more significant right here than anywhere else. These items give median numbers in each grade and in each room of the two types of schools as shown.

Facsimile Programs. As a much more minutely itemized tabulation of what actually takes place in one day in each type of school under consideration at its best, the following facsimile programs of recitations and out-of-class activities were secured and are published. The best school of each type was taken because a publishable record like Tables XLVII and XLVIII is easily obtainable only where schools are working approximately up to the day's possibilities. At the top of each program, the number of children per grade is indicated in parenthesis. In Table XLVII, which describes, except for the intermissions, the total day's activities of a district school, it was possible to assemble the recitation schedule at the left. However, the recitations are shown here, as in Table XLVIII which describes a consolidated school, in capitals in the columns for each grade. Brief explanatory notes are found at the end of each program.

The reader will readily see that, since each of the teachers of the consolidated school had two grades to teach, it was possible to give a time schedule against each two grades. On the morning of the writer's visit to this consolidated school, the fifth, sixth, seventh, and eighth grades were united for Chapel Exercises, which consisted of two songs, a Bible reading, and

the Lord's Prayer. This is stated in explanation of what is meant by the word Chapel in Table XLVIII.

Divergent Programs. These programs make clear the very wide difference in the problems faced by teachers of district schools of many grades and of consolidated schools with few grades to each teacher. The district school teacher who handles a day's work such as is shown in Table XLVII, must be a rapid-fire instructor and an executive genius of the first order. The teachers in the consolidated school whose program is shown in Table XLVIII, must be able to control masses of children of the same ages and grades; and it will be their problem to give a comparatively small total instruction with sufficient deliberation, enriched by enough variety and freshness of expression and illustration to keep the children interested all day. It should be recalled in this connection that the typical district school of the townships studied has but sixteen pupils and these were distributed to only six grades. Further suggestions relative to these tables are made in the last chapter.

Paragraph Summaries of More General Inquiries

Truancy. Other inquiries made concerning the schools, were answered in such a variety of ways that the results cannot be advantageously tabulated. The four district school townships report 34 cases of truancy, and the four consolidated school townships reported three cases of truancy. A comparison of these items, with the actual attendance record presented in Table XLIII, suggests that there is no effective handling of truancy in either type of school, in so far as the localities reported in this survey are concerned.

School Sentiment. In answer to the inquiry—What have you done to create school sentiment?—an interesting variety of answers was given although many teachers had nothing to offer in response to this inquiry. Sample answers by district schools are: "I tried to make the work practical and interesting." "We had two socials and a party. People say that these have helped." "We had special programs." "I offered prizes for the best attendance." "I have tried to encourage punctuality and education in general." "I had entertainments, a picnic, and made visits to the homes." "I conducted patriotic opening exercises."

TABLE XLVII

Daily Program of Recitations and Out-of-Class Activities of One District School

Time	Recitation	(3) Begin. & Grade I (3)	(4) Grade II	(4) Grade III	(6) Grade IV	(3) Grade V	(2) Grade VI	(4) Grade VII	(1) Grade VIII
9:00	Opening (Music, Nature Study, Story Hour, Penmanship)								
9:15	1st & 2nd Numbers	Numbers	Numbers	Prepare Numbers	Prepare Numbers	Prepare Arith.	Prepare Arith.	Prepare Arith.	Prepare Arith.
9:25	3rd "	Stringing	Number work from blackboard	Numbers	"	"	"	"	"
9:30	4th "	"	"	Number work from blackboard	Numbers	"	"	"	"
9:40	*5th Arithmetic	Sand Table	Go to board to illustrate Arith.	"	Numbers from bk.	Arithmetic	"	"	"
9:55	*6th "	Excused	Excused	Excused	"	Arith. from bk.	Arithmetic	"	"
10:10	7th & 8th "	"	"	"	Devices at board for drills	"	Arith. from bk.	Arithmetic	Arithmetic
10:30	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*
10:45	Beginning Reading	Begin. Reading	Prepare Reading	Prepare Reading	Prepare Reading	Prepare Reading	Prep. Reading or History	Prepare History	Prepare History
10:50	1st "	1st Reading	"	"	"	"	"	"	"
10:55	2nd "	Build sentences out of hektographed words from lesson Excused	Reading	"	"	"	"	General and indiv Prepare History	idual assignments Prepare History
11:05	3rd "		Build words out of letters Excused	Reading	"	"	"	"	"
11:15	4th "			Illustrate Reading with paper cutting Excused	Reading	"	"	"	"
11:30	†5th "	"	"		Pick out names of people, towns, etc. from Reading lesson	Reading What would pupils do under similar condit.	One—5th Read.	"	"
11:40	†U. S. Hist., 7th & 8th	"	"	"			One—7th Hist.	History	History
12:00	*NOON*	*NOON*	*NOON*	*NOON*	*NOON*	*NOON*	*NOON*	*NOON*	*NOON*
1:00	Beginning Reading	Begin. Reading	Use Reading Bks.	Use Reading Bks.	Read. of types of people in Geog.	Prepare Lang.	Prepare Lang.	Prepare Gram.	Prepare Gram.
1:05	‡1st "	1st Reading	"	"	"	"	"	"	"
1:15	‡2nd "	Illus. Reading lesson (drawing)	Reading	"	"	"	"	Poems and D Prepare Gram.	ramatisation Prepare Gram.
1:25	‡3rd "	"	Illustrate Reading at sand table	Reading	"	Prepare Spell.	Prepare Geog.	"	"
1:35	4th Lang. or Geog.	"	"	Seat work from Reading lesson	Lang. or Geog.	"	"	Prepare Geog.	Prepare Geog.
1:50	5th Lang. or Phys.	"	"	"	Illustration of subject studied	Lang. or Phys.	Lang. or Phys.	"	"
2:05	1st, 2nd, 3rd Lang.	Language	Language	Language	"	Prepare Geog.	Prepare Geog.	"	"
2:15	7th & 8th Grammar and Phys. (alt.)	Excused for day	Excused for day	Excused	"	"	"	Gram. or Phys.	Gram. or Phys.
2:30	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*	*RECESS*
2:45	3rd & 4th Spelling			Spelling	Spelling	Prepare Geog.	Prepare Geog.	Prepare Geog.	Prepare Spell.
3:00	§5th Geography			Excused for day	Excused for day	Geography	Prepare Spell.	Prepare Spell.	"
3:15	§6th, 7th, 8th Geog.					Prepare Spell.	Geography	Geography	Geography
3:35	8th Civics					"	Prepare Spell.	Prepare Spell.	Civics
3:45	5, 6, 7, 8 Spelling					Spelling	Spelling	Spelling	Spelling
4:00	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*	*DISMISSAL*

* Alternate with Agriculture in the spring. † One 6th Grader worked with 5th Grade and one with 7th and 8th.
‡ Sometimes combined for literature. § Drawing, etc.

TABLE XLVIII

DAILY PROGRAM OF RECITATIONS AND OUT-OF-CLASS ACTIVITIES OF THE FIRST EIGHT GRADES OF ONE CONSOLIDATED SCHOOL

TIME	(27) BEGIN. & GRADE I	(32) GRADE II	TIME	(25) GRADE III	(24) GRADE IV	TIME	(26) GRADE V	(19) GRADE VI	TIME	(24) GRADE VII	(20) GRADE VIII
8:30	OPENING EXERCISES		8:30	CHAPEL		8:30	CHAPEL		8:30	CHAPEL	
8:50	1st READING	Prepare Reading	8:45	STUDY PERIOD		8:50	Prepare Arith.	SPELLING	8:40	ARITHMETIC	Prepare Arith.
9:10	A. PRIMER		9:00	Written Language	READING	9:00	ARITHMETIC	Prepare Arith.	9:00	Prepare Geog.	ARITHMETIC
9:30	B. PRIMER	Write Spelling	9:30	LANGUAGE	Prepare Spelling	9:30	Prepare Geog.	ARITHMETIC	9:20	WRITING	WRITING
9:50	PHYSICAL CULTURE		9:45	SPELLING	SPELLING				9:35	GEOGRAPHY	Prepare History
9:55	Busy Work	READING									
10:10	*RECESS*	*RECESS*	10:10	*RECESS*	*RECESS*	10:00	*RECESS*	*RECESS*	10:00	*RECESS*	*RECESS*
10:15	1st SPELLING	Sentence Making	10:15	STUDY PERIOD		10:15	GEOGRAPHY	Prepare Reading	10:15	Prepare Phys.	HISTORY
10:25	Making Numbers	SPELLING	10:30	ARITHMETIC	Prepare Arith.				10:35	PHYSIOLOGY	Prepare Phys.
10:35	NUMBERS	Written Numbers				10:45	Prepare Phys.	READING	10:55	Prepare Spelling	PHYSIOLOGY
10:55	Work with blocks, sticks, balls, etc., to impress Numbers	NUMBERS	11:00	Prepare Reading	ARITHMETIC	11:05	PHYSIOLOGY	Prepare History	11:15	SPELLING	Prepare Reading
11:30	*NOON*	*NOON*	11:30	*NOON*	*NOON*	11:30	*NOON*	*NOON*	11:30	*NOON*	*NOON*
12:30	SINGING		12:30	Read or Tell a Short Story		12:30	CURRENT EVENTS, NATURE STUDY, DRAWING		12:30	Prepare Grammar	READING
12:40	TALK ON NATURE, PHYSIOLOGY, ETC.		12:40	READING	Prepare Language	12:40	Prepare Language	HISTORY	12:50	GRAMMAR	Prepare Grammar
1:00	WORD DRILL	Prepare Reading	1:10	Learn Quotations	LANGUAGE	1:00	WRITING	WRITING			
1:15	Cover new word with corn	PHONOGRAMS				1:10	LANGUAGE	Prepare Language	1:10	Prepare History	GRAMMAR
1:25	A & B PHONOGRAMS	Prepare Reading									
1:30	Form new word with pegs, etc.	READING	1:30	WRITING	Prepare Geog.	1:30	Prepare Reading	LANGUAGE	1:30	HISTORY	Prepare Geog. or Agriculture
1:40	1st READING	Write story									
1:50	*RECESS*	*RECESS*	1:50	*RECESS*	*RECESS*	1:50	*RECESS*	*RECESS*	1:50	*RECESS*	*RECESS*
2:00	WRITING	WRITING	2:00	PHYS. or GEOG.	Prepare Geog.	2:00	READING	Prepare Geog.	2:00	*Prepare Geog.	*GEOG. or AGRI.
2:20	LANGUAGE WORK, STORIES AND GAMES		2:15	Prepare Spelling	GEOGRAPHY	2:25	Prepare Spelling	GEOGRAPHY	2:20	READING	Prepare Spelling
			2:40	Written Work	WRITING	2:50	SPELLING	Prepare Spelling	2:40	Prepare Arith.	SPELLING
3:00	*DISMISSAL*	*DISMISSAL*	3:00	*DISMISSAL*	*DISMISSAL*	3:00	*DISMISSAL*	*DISMISSAL*	3:00	*DISMISSAL*	*DISMISSAL*

* 7th Grade recites Agriculture at 2:00 on Tuesday and Thursday; 8th Grade recites Geography at 2:00 on Monday and Agriculture on Wednesday and Friday.

"I tried to make work in school pleasant and not a drudgery." "I introduced construction work and art, and tried to give the children their rightful freedom." "I gave talks on lives of great men and tried to cultivate the personality of the pupils." Answers from teachers of consolidated schools mentioned having college men give addresses, holding entertainments, using an outline given by the Superintendent and supplementing it, and the use of story telling.

School Property. Another inquiry asked what had been done to improve the school grounds, the buildings, and the equipment. The district school teachers had cleaned the yard, set out trees, trimmed trees, planted flowers, set woodbine by buildings, and made gardens. For the improvement of the buildings one teacher scrubbed the floor, one washed the windows and woodwork, others had new steps built, new blackboards put in, and one said: "We have had a hammer and saw, and when anything was out of repair, the pupils fixed it." Under the improvement of the equipment, library books, chairs, desks, library case, pictures, and construction materials, are mentioned. One teacher provided a bell and a clock, by means of entertainments and socials. The teachers of the consolidated schools reported such items as planting flowers and trees, keeping the grounds clean, and securing laboratory equipment, new seats, and a piano.

Special Efforts. Several teachers in each type of school reported special efforts to develop patriotism and morality, but these answers specified nothing further than the observance of national holidays and the use of good example. Under the inquiry as to special work accomplished, the following items were given: For the district schools—introduced individual drinking cups, created sentiment for politeness, interested older pupils in higher education, secured instructive exhibits from manufacturers, and aroused athletic interest; for consolidated schools—introduced use of pupils' reading circle work, organized a display of work at the Grange fair, and secured a stronger course of study.

Present Needs. In replying to the inquiry—What are the present needs of this school?—the teachers of district schools mentioned a wide range of particulars. Among the items specified were—school-bell, teacher's desk, new floor, maps, library,

chairs, pictures, window-shades, materials for elementary grades, supplementary text-books, reference books, book case, new roof, more blackboard, flag, mirror, sanitary drinking facilities, new stove, new seats, gravel in yard, globe, porch, paint, and instruction in agriculture. The responses from teachers of consolidated schools to this inquiry included mention of—library books and supplementary materials for lower grades, longer school year, more room, another teacher, music teacher, drawing, agriculture. The presence of a superintendent and the employment of a janitor in the consolidated schools relieve the teachers from much direct personal responsibility for the school plant.

Nature Study and Agriculture. The last inquiry relative to the school was—What have you done in nature study and agriculture? Fifty per cent of the teachers of district schools had done nothing. Where work was undertaken, few discriminated between nature study and agriculture. The topics considered were—grains, fruits, flowers, birds, insects, trees, seed testing, animal husbandry, soil, and weather maps; and several used facts from nature and reference to books and bulletins on agriculture in connection with language work, geography, history, and morning exercises. Ten per cent of the district teachers reported school gardens. One teacher, who was the daughter of a farmer and had graduated from an excellent college, did nothing with either nature study or agriculture. The consolidated schools reported regular classes in agriculture in three of the four high schools, and miscellaneous work touching various topics of nature study and agriculture in the grades. One school had regular class work in agriculture in the seventh and eighth grades. Several teachers made good use of plants in the schoolrooms for nature instruction.

Unworked Problems. The foregoing paragraph summaries conclude the presentation of the school status. Other items could be added by a more intensive study and greater accuracy could be secured by a more prolonged research. However, the serious reader of this chapter will be safe in relying upon the trustworthiness of the data given. The captious critic is asked to conserve his wit in constructive suggestion; for, certainly, no

part of American educational activity can profit more from scientific research and efficient publicity than rural education.

Perhaps the most obvious omission is that of a presentation, with explanatory discussion, of the high school work done by the consolidated schools. It has been thought best to adhere to the intention stated in the introduction to make this study refer chiefly to elementary education. The provision of worthy secondary school instruction for the youth of rural communities is probably too expensive a task for any one strictly rural township; at any rate, that was the impression gained by the writer in repeated visits to the high school departments of the consolidated schools reported in this study. A scientifically thorough study of the problem of secondary education in the country, together with competent digestion and statement of the actual facts and possibilities, would be a very valuable public service.

Before proceeding with the next chapter, which will offer some constructive interpretations of the data already shown, a brief recapitulation of the purpose and contents of this chapter is given. Chapter II sets forth the relative situations of the several localities in their economic, social and domestic phases, and this chapter is intended to present the various school situations; the number of communities studied in this respect being doubled to give a broader and safer basis for comparison. This chapter has tabulated and explained four groups of facts:

1. The relative economic and administrative phases of the school status.
2. The relative educational, professional and social qualifications and activities of the teachers and supervisors.
3. The relative attendance, activities, progress and occupations of pupils.
4. A summary of relative facts of a more general nature.

CHAPTER IV

CONSTRUCTIVE INTERPRETATIONS

DIVISION I. SCHOOL CONSIDERATIONS

Paralleling Conditions. The method of paralleling the district schools and the consolidated schools, used throughout Chapter III, will be continued in the constructive interpretations concerning these schools in this chapter. Published studies of both types of country schools have dealt too much with the extremes of existing conditions. Today, the public knows the worst and the best rural schools; and the district schools, because they are familiar in caricature and from without rather than in fact and from within, have been far too often classified among the worst; on the other hand, consolidated schools, because they are novel to persons writing about them, physically younger, and less well typified in current thought—since what they seem to be, rather than what they really do, is known—have been too often, in fact well-nigh always, classified among the best.

Paralleling facts which seem to cover the same activities and results in two different types of the same institution, is obviously dangerous to the extent that the types are really different, which introduces an as yet poorly defined margin of error in practically every comparison of items. However, in the present unscientific stage of thought and knowledge about rural schools, this margin of possible error will prove a convenient cloak for the impatient advocate of either type who may have printed first and informed himself afterwards.

Experience and Science

Exactness in Education. The Harvard Teachers' Association, at its twenty-first annual meeting in March of this year, discussed tests for school and college efficiency. Professor E. L.

Thorndike stated that education has at last begun to be appreciated as an exact science based on verifiable, quantitative knowledge which is capable of rigid, unambiguous measurements. Dr. L. P. Ayres said, "In the management of our schools, as in our teaching, there must be a scientific basis." And again, "Scientific management and method have invaded the educational camp and demolished tradition." Both of these men are leaders in substituting evidence for speculation and knowledge for opinion in school publicity. Dr. Ayres deprecated superficiality and pseudo-expertness and said, "Only acid and questioning scrutiny of the work of experts, as well as novices, will prevent disaster." (*Journal of Education,* March 14, 1912, p. 302.)

In the same discussion, Assistant Superintendent Thompson, of Boston, stated clearly the conviction that it is not best to attempt measurement of all educational achievement. He held that there are personal, spiritual values, which cannot be subjected to tests which are all right as applied to the material features of school work. The two points of view illustrated in this discussion are at present in the process of adjustment to each other. The writer admittedly has by training and experience much less of the scientific than of the spiritual viewpoint; but the possession of both, in harmonious and stimulating interaction in thought, is coveted.

The Setting

Early History. In the early days of this nation, country children were in such vast majority that they realized on a very large part of the general interest in education. Before the rise of the secondary schools, other than the academies, elementary education also drew a predominating proportion of local educational interest and effort. By the multiplication of cities and the rapid increase in their population, together with the rise of secondary education and higher institutions of learning as public enterprises, rural education and elementary education in general lost rank in the public's educational program.

The depletion of natural resources, the improvement in facilities for transportation and the invention of large capacity manufacturing machinery, together with the mechanical devices for

saving hand labor in agriculture have been the chief among many causes resulting in the necessity of reconstructing rural life and its institutions to fit a distinctly different situation. The new situation, has, however, been gradual in development and somewhat insidious in that it has taken long enough to allow its total effects to be distributed, in the localities under discussion, to three generations— the pioneers who saw the changes begun, their sons who lived out their active lives in the period of the transition, and their grandsons, the present active generation, who were born into the flood of new life.

Education has suffered severely in the country by the predominating emergence of urban life, by the absorption of public educational interest and resources disproportionately, by the newer and more aggressive secondary schools and universities, and by the time element in rural progress being too long to allow the full significance of the changed situation to be felt by the present generation.

Readjustments in Progress. However, readjustment of the rural school in a multiplicity of particulars has been in progress throughout the years under the suggestion of the best informed men in the local communities, prompted by suggestions of the press, by public speakers, by state and county officials, and by observation and thought upon existing local conditions. How the phases of this readjustment have run, comparatively, in Michigan and Ohio, may be seen in the introductory chapter. As suggested there, and reiterated in the paragraphs preceding this one, there has not seemed to be enough need felt at any one time to initiate a thorough-going revision of the whole situation. It is possibly safe to accept the current judgment of the passing years that no wholesale changes were necessary.

Among the larger forms of readjustment in rural education, the consolidation of small schools by twos and threes to form other small schools, has been going on slowly, without much public interest, for many years. Between 1881 and 1907, the number of districts in Kalamazoo County decreased from 134 to 122; but these changes did not change the type of school, as only new one- and two-room schools resulted from these consolidations. However, in the past twenty years, there has been a wide-spread and insistent assertion by educators and others

that nothing short of the consolidation of enough districts to make a school like the urban graded schools and of sufficient financial resources to maintain a high school, could save the rural educational situation.

This propaganda has resulted in a slowly increasing number of consolidations on the scale indicated, and most unstinted praise has been given to this newer type of rural school. But still the movement for general consolidation lingers; in fact, it cannot get under way at all in a great majority of rural localities. Meanwhile, the proponents of the new form of organization have, in many cases, lost interest in the existing district schools, thus dividing the local initiative already in many districts so small that this time honored institution was not given a fair chance.

Unanswered Questions. In spite of the conceded difficulties of reorganizing local institutions and ignoring the attitude implied and sometimes expressed by educational enthusiasts that farmers as a class are opposed to all progress, there have been voices raised with increasing frequency to inquire if the consolidated school is the true up-to-date type of rural school; and, if such is the case, why do not the farmers—who are now pretty thoroughly familiar with a long list of published disadvantages of their present district schools and, if possible, a longer published list of the advantages of consolidated schools—why do these people, who are certainly the most vitally interested, hesitate to act favorably on the proposition?

To afford materials for working out an answer to this question, more intensive studies than have yet been made into the actual services rendered by both the district and the consolidated types of rural schools, are needed. And, as forming the perspective for these intensive studies and thus lending and multiplying significance to facts learned about these schools, comprehensive studies of the entire rural situation for the purpose of telling the whole truth as nearly as it may be known are essential. Studies of various phases of the school situation alone have been published occasionally and, at present, the amount of real research study in rural education is rapidly increasing. The new Division of Rural Education in the Federal Bureau of Education will no doubt be an effective clearing house for the

evaluation and the wide and prompt diffusion of the new information gained.

The Discussion

Large Considerations. Two major questions suggest themselves to the students of the rural school: What, in the essentials of its autonomic activities, is the effectiveness of this school as an institution, and What is its worth as an integrating agent in the life of its community? Attempts to answer these questions must be based upon an inside, itemized research in the minor facts of the sustenance and life of the institution; and from a logical organization of these facts, there must be worked out, first, the success of the school as a distinct institution. Certainly the school will make its first and greatest community contribution by dignifying its own name and work with the badge of conceded success. In a successful school, internal activities beget their own external affiliations to an extent which opens the way for a consideration of the school as a dynamic factor in the life of its community.

Section I. Maintenance

Administration. Taking up the first large question—that of the essentials of autonomic activity—maintenance, including the discovery, accumulation, and most effective use of maximum financial resources, is the first essential. In rural schools, the whole matter of maintenance is left to local lay administration, except in so far as state constitutions and statutes may fix and enforce some minimum limits and may provide state aid funds. Minimum limits are set up to insure a school year of sufficient length, the regular attendance of young children, and instructors of sufficient intelligence to safeguard the rights of the child and the well-being of the state at large as well as the local community. State aid funds re-enforce, with the right and the means of execution, the minimum limits set up.

Inspection of Tables XXVII and XXVIII shows that in the district school townships, separate school jurisdictions varied in the areas included from 2 13/16 sections, in District Five, Cooper, to six sections in District Four, Cooper. In considering district areas, the reader should ignore the fractional districts because parts of these districts not in the township where the

school is administered, were not always obtained. District areas are determined by the topography of the land, the way the roads run, the location of the homes, and the willingness of the people within the area at the time of organization to undertake the maintenance of a school. But these areas remain fixed in boundary for years without much regard to fluctuation in the population.

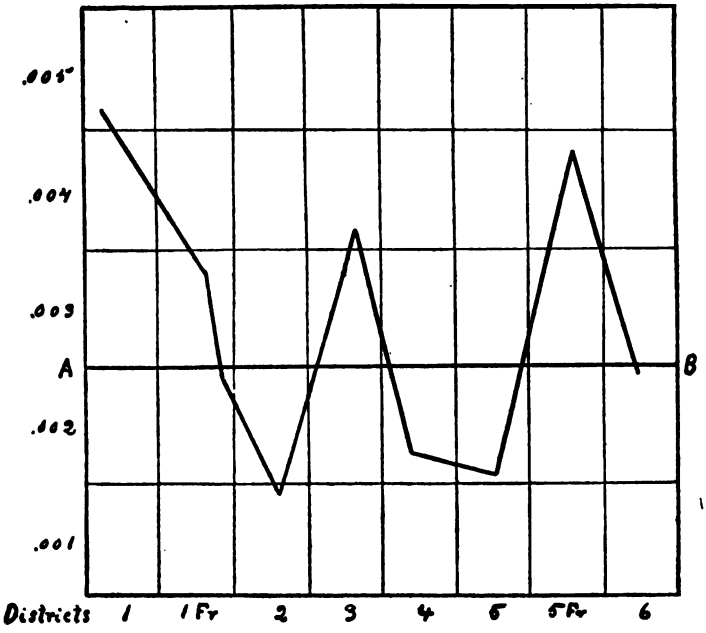


FIG. 1. Alamo Township
Variations in Rates Per Cent of School Tax in Eight Districts

Taxation. Again, inspection of the same tables shows that district valuations in these Michigan townships ranged from $30,530, in District Three, Alamo, to (omitting the village districts) $200,000, in District Nine Fractional, Ross. This tax valuation is the largest item in the explanation of a range in the local tax rate from one mill, in several of the districts, to .0043, .0045, and .0048, in other districts. Forceful illustration of the inequalities of the tax situation in district school townships, may be had in a comparison of Districts Two and Three in Alamo townships. These districts, though nearly the same in area, vary

in valuation from $119,660 to $30,530; and in tax rate from .0019 to .0042; and yet on a tax rate less than one-half that of District Three, District Two paid $412 for education to $416 paid by District Three. This inequality is further emphasized by the discovery that the poorer district pays a per capita cost eight dollars higher than the richer district. Tax reform could be accomplished by making the township the unit for taxation and administration regardless of whether or not the schools

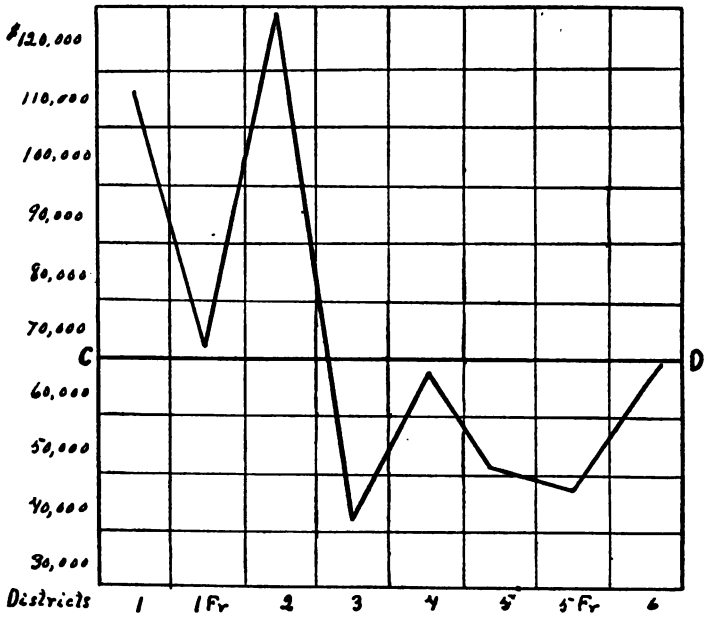


FIG. 2. Alamo Township
Variations in Valuation of Taxable Property in Eight Districts

were consolidated. The consolidated townships have solved this problem.

These facts for the district school township of Alamo are shown graphically in Figures 1 and 2. Line A-B, in Figure 1 locates the tax rate necessary to raise the same amount of money for school support with the township, instead of the district, as the unit. Line C-D, in Figure 2, shows the median valuation of the districts of Alamo township. If the districts in Alamo township which are paying more than the median tax rate wish

to relieve themselves by making the township the unit of taxation, they may have recourse to the optional township unit statute, bring on a township referendum of the matter and force the wealthier districts, which in this particular township have a majority of the votes, to say whether they will help them. The fact is that administrative unity in the townships of Michigan has become identified with the idea of a township consolidated school. The present Michigan law is aimed at administra-

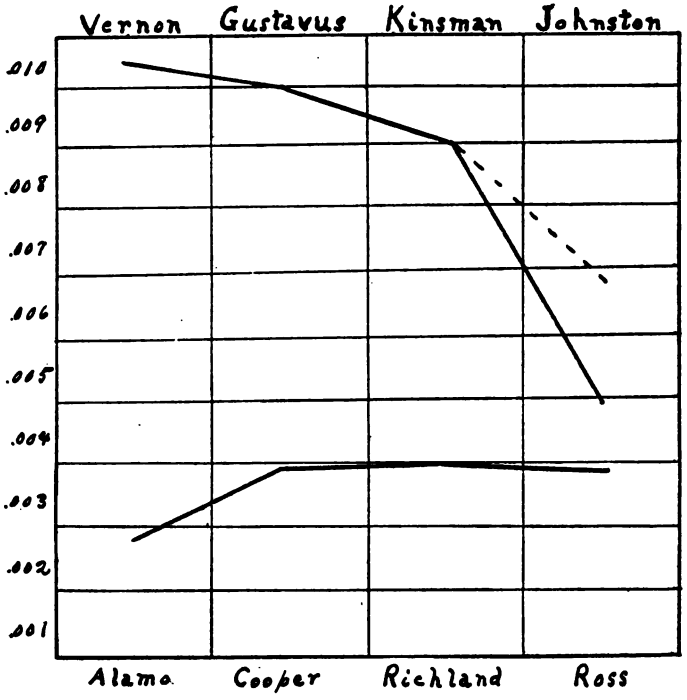


FIG. 3. Comparison of Tax Rates
Consolidated Townships at top. District Townships at bottom.

tive unity alone, and no doubt more use will be made of this law when its true character becomes better known.

Figure 3 shows, comparatively, the tax rates of the four consolidated school townships, at the top, and the four district school townships, at the bottom. The dotted part of the line, for Johnston township, indicates what the tax rate would have been if enough money had been raised to cover the whole annual school budget. There was a deficit of $2500.

Rate of Tax. This figure raises another question of school maintenance equal in importance to the whole question of an equal distribution of the burden of taxation. What is the maximum bearable tax rate for school purposes in these rural communities? If Gustavus township, which has a per capita ownership of taxable property of $672, bears a school tax of ten mills, and only eleven heads of families out of 164 interviewed make any objection to the school and none of these eleven mention the tax rate; and if Cooper township, which has a per capita of taxable property of $642, pays a rate of about one and one-half mills and no one objects to this rate as either too high or too low, out of 192 heads of families interviewed, may it be safely concluded that the school tax rate is largely a matter of habit? If so, then it is pertinent to inquire at what maximum and what minimum limits would a school tax rate break out of habit into consciousness? That scheme of administration which is able to employ this taxpaying habit nearest to the maximum margin is obviously the best scheme, in so far as the getting of the school budget goes.

Estimates of Results. The estimates put on the results of the school service by heads of families in the Cooper and Richland district school townships, were that the schools are satisfactory; for 85 per cent said " Yes " and 15 per cent said " No, we are not satisfied." In the consolidated school townships of Gustavus and Kinsman, the percentages of satisfied and unsatisfied patrons were the same as in the district school townships. From these facts, it appears that the schools of both types are equally satisfactory in the opinion of their patrons. The miscellaneous remarks, printed in Table XI, strike no outstanding common objection to either type. For the district schools, the objections relate chiefly to the officers, teachers, general conduct of children, and the curriculum. For the consolidated schools, objections are raised to the length of school day, distance and waste of time, spread of diseases and the effects of the long ride on frail children.

Cash on Hand. The amount left on hand at the end of the year was more than three times as great in the district school townships. Out of thirty district schools, seven carried over more money in their budgets than they spent for teachers' wages in the current year. An amendment to the state constitution,

voted in April, 1911, eliminates from participation in the annual appropriation of the state common school fund, such districts as have enough of this fund on hand at the close of the school year to pay their teachers' wages for two years and also pay tuition of eighth grade graduates for that length of time. In the whole matter of getting a large tax without serious hardship and distributing the burden equally over the whole township as well as in the use of this money in the year for which it was intended, the consolidated scheme of administration makes a far better showing than the district scheme. The purposes for which money is spent, under the two types of administration, appears in Table XXXIII; but the proportion which is wasted in each system, is not easy to determine. The fact that the consolidated schools pay a per capita for school maintenance, which is one-half larger than that paid by the district schools, raises again a question which was first suggested by the more than double tax rate of the consolidated schools.

State Aid. The real range of difference in local contribution to the school maintenance budget, could be seen by eliminating the per capita state apportionment from the total per capita spent, if all of the money in the annual budget were expended each year. But, as has already appeared, there is a comparatively large amount carried over from year to year, especially in the districts; and there being no way to tell, from the tables presented, how much of this surplus is state aid, little can be done here in an attempt to differentiate local and state funds. This differentiation would furnish a prime object for an intensive study of the district schools of Michigan. However, the total per capita may be broken up to show approximately what shares of it are used for upkeep, for transportation, for high school instruction, and for elementary school instruction. The state apportionment in Michigan, for the school year of 1910-1911, was $7.90 per capita, and in Ohio, this apportionment was $2.00 per capita.

Per Capita Cost. The gross annual per capita cost of education in the district school townships, was $23; and in the consolidated school townships, it was $34. The per capita for care and upkeep in the district schools, was approximately $7; and in the consolidated schools, it was approximately $5; the consoli-

dated schools paid a per capita of $15 for transportation and a per capita of approximately $4 for high school instruction. Eliminating care and upkeep, transportation, and high school instruction, it appears that the district schools paid a per capita of approximately $16 and the consolidated schools paid approximately $10 per capita, for elementary school instruction.

Expense of High Schools. The city of Kalamazoo had 15 per cent of its total enrollment in the high school grades in 1911 and it paid 25 per cent of its annual budget for teachers for the instruction of these grades. The consolidated schools considered in this study, spent 46 per cent of their annual budgets for instruction for the 19 per cent of their total enrollment found in the high school grades. The high schools had an average enrollment of 37. In one high school, at the time of the writer's visit, a teacher, who was a high school graduate with two years' experience and five weeks' normal school training, spent the 35 minute recitation period teaching a class of one pupil in Latin; while on the same floor, another teacher, who was a high school graduate without experience and without any special training, passed a 35 minute recitation period of mutual endurance with a grammar grade class of 23 in English. Each of these teachers was responsible for another group of children who were in their seats during this recitation period. This is an exceptional instance in the high school, but it is not so exceptional in the grades.

High schools which average 37 pupils in four grades are certainly as much to be deplored on the maintenance side as are ten-pupil district schools. Both are glaring examples of waste in education. When it is remembered that these 37 high school pupils, who are but 19 per cent of the school's total enrollment, receive 46 per cent of the annual school instruction budget, the situation changes from a farce to a tragedy. Constructive suggestion will be deferred until other phases of the school situation have been presented.

Section II. Instruction

Teaching Corps. Estimates of the worth of rural school instruction may be gained from research in the items of the personal, academic, and professional preparation of the teachers.

Personal preparation turns, very largely, on percentage; and Table XLI shows that 83 per cent of the teachers in the district schools were children of farmers, while 80 per cent of the teachers of consolidated schools had this parentage. The meaning of this fact has been discussed at length by Dr. L. D. Coffman, in his study of "The Social Composition of the Teaching Population." On page 79 he says: "This condition means that the population which teaching selects is restricted as to its opportunities for personal improvement and liberal culture; that in the main it must enter the field of teaching with little or no professional preparation." And he adds the question: "What wonder is there that teachers receive small salaries and that there is a woeful lack of professional spirit among them?"

Educational Standards. Table XLI shows that the median years of educational preparation for district school teachers is 12; and for teachers in consolidated schools, 12.9. This means high school graduation in the first case, and approximately one year in addition to high school graduation in the other case. If, as is probably true in both cases, the high school instruction was largely in village and consolidated school high schools, there is a wide range in the real limits of its possible meaning. Village high schools in Michigan and the consolidated school high schools seen in Ohio are about as little standardized as is possible for them to be and still use the name high school. Eliminating all of the teachers of secondary school grades, in both kinds of schools, the teachers of the elementary grades in the district schools show an average of 11.6 years of educational preparation; and these teachers in the consolidated schools show an educational preparation of 12.1 years. This indicates a quantitative advantage of one-half year for the teachers of consolidated schools.

Professional Preparation. In the same table, it is further shown that practically the same status exists in both groups of teachers in the significance of the kinds of teachers' certificates held. The teachers of consolidated schools have had practically one more year of such professional preparation as comes from unsupervised teaching experience. The median number of months of normal school instruction was six for the teachers of district schools and three for teachers of consolidated schools.

Eliminating the teachers of secondary school grades in both instances for each kind of school, it appears that teachers of elementary district schools have had approximately two years of experience and approximately one year of normal school instruction; and the teachers of elementary grades in consolidated schools have had approximately three years of experience, and approximately one-half year of normal school instruction. In determining the approximate experience, extreme cases were eliminated in both instances. Age, no doubt, has value as a professional qualifier. Table XLI shows that the median age of the district school group of teachers was 22 years, and for the consolidated group, 24 years. Confining this item to teachers of elementary grades in both kinds of schools, it becomes for district school teachers, 23 years; and for consolidated school teachers, 23.3 years.

Growth in Service. The facts presented in the two preceding paragraphs were derived from Tables XXXIV and XXXV. Table XXXVI presents facts indicative of the professional growth of the teachers while in service by means of attendance at institutes, reading the books offered in the Teachers Reading Circles of the states, and taking current educational periodicals. In the matter of days spent at institutes during the year, the teachers of consolidated schools show four and one-half days to two days shown by the teachers of district schools. In both cases, the teachers went to practically all the institute sessions that they had opportunity to reach. In the other items mentioned, the median numbers were the same—two, in each case and instance. Stimulation to growth by effective supervision is missing from both types of schools.

The annual visit of the County School Commissioner to the district schools may be more effective than appears on the surface when the commissioner has kept acquainted with the situation by aid of correspondence and the telephone, and by the visits to his office of officers, patrons, and teachers. Superintendents of the consolidated schools, who have a tenure long enough to beget acquaintance and confidence and who are well enough prepared in the several high school branches which they teach to give them some freedom, may use the very brief time at their disposal for supervision to some effect. Reference to

Table XXXVII shows that, in the four consolidated schools under review, the supervisory activity of the head of the school ranged from no visits to four rooms, to 32 visits to each of three rooms. These items were given from memory by the teachers.

Social Stimulations. In such encouragements to growth, self-respect, and professional spirit as teachers may get from visits of officers and patrons to the school and from being entertained in the homes of the pupils, there is no noticeable difference, as the summaries of these items in Table XLI show. Summaries of the items—social gatherings attended by teachers, social gatherings managed by schools, and public entertainments given by the schools, are also given in this table. In these particulars, the advantage, in two out of the three items, rests with the teachers of consolidated schools quite decidedly. Further reference to these items will be found in Section IV, following. Specific constructive discussion is also deferred to the conclusion of the section mentioned.

Section III. Children

Degrees of Effectiveness. The relative effectiveness of district and consolidated schools in their actual service to children, in so far as quantitative measurements reveal this fact, may be seen in the actual attendance, in an age-grade computation, and in the daily recitation and study programs of the schools. This is granting to their teachers approximate equality of training, experience, and capacity for management, instruction, and inspiration. There is also an outside index of the administrative effectiveness of the school, in such items as "In School Elsewhere," "Not Entered," "In Occupations," and "Unaccounted For," shown in Table XLII, especially when the item as to occupations is broken up, as in Table XLIV, to show the grades that were completed by the children who have left school to go to work.

Age-Grade Index. Keeping in mind that the legal school census age in Michigan is 5 to 20 years and in Ohio is 6 to 21 years, a fact directly related to later entrance in school in the consolidated schools, there is still a very noticeable excess in the percentage of over-ageness in these schools. Reference to Table XLII shows that the percentages of over-ageness in the first

eight grades in the district schools, run from the first to the eighth as follows: .08, .14, .21, .23, .15, .43, .30, and .27; the corresponding percentages for the consolidated schools, are: .11, .37, .38, .50, .55, .55, .58, and .45. This means that the percentages of children who, by age, ought to have finished each grade, who really did not finish, were (district schools first in couplet)—first grade, .08—.11; second grade, .14—.37; third grade, .21—.38; fourth grade, .23—.50; fifth grade, .15—.55; sixth grade, .43—.55; seventh grade, .30—.58; and eighth grade, .27—.45. How much of this over-ageness is due to late entrance and irregular attendance is not determined. Over-ageness for these causes while largely waste, since in these particulars the schools are probably planned somewhat with a view of taking care of children in the age-grade groups to which they normally belong, may not be so bad on the human side as over-ageness resulting from poor organization and poor instruction; since repetition of work may discourage as well as delay the child.

The far better showing made by the district schools in this respect is directly related to the nearness of these schools to the homes and the earlier entrance of small children. The practice of some district school teachers of distributing a grade, by putting some members of the grade partly in the grade below and some more largely and more often in the grade above, also affects the comparison. The incidental instruction, which a child gets by listening to higher grades recite, is also an aid to many district school pupils. Where the morale of the school is high, the wider diversity of interest and the larger unity of program of the district school may add a stimulus. The figures shown in Table XLII, from the Indianapolis city schools for the years 1908 and 1911, show an example of reducing over-ageness from 30 per cent to 70 per cent, in each grade, by giving this matter the close consideration which its importance deserves.

Actual Attendance. Table XLIII shows a distribution of actual attendance in ten-day groups, in which it appears, as already explained in connection with that table, that 14 per cent of the district school pupils attended school but three months or less, while but 6 per cent of the children enrolled in consolidated schools had so poor a record of attendance. This fact is doubtless partly due to the presence of district school children about

home both before and after school, long enough to prove the great convenience and value of child labor in the house and about the farm. This research was not able to get sufficiently accurate data of the reasons for absence on which to base percentages; but, in a study of the whole county of Kalamazoo by the writer in 1907, which was more intensive in this particular, the chief reasons for the absence of children from the district schools were: work, 51 per cent; sickness, 23 per cent; and lack of interest, 12 per cent. (Rural School Efficiency in Kalamazoo County, Michigan, Bulletin No. 4, 1909, Michigan Department of Public Instruction.) Transportation increases regularity and establishes punctuality in school attendance.

It appears further from Table XLIII that but 57 per cent of the children enrolled in the district schools studied had a total attendance of seven months or more during the year, while 75 per cent of the children enrolled in consolidated schools had as good a record, though the school year of these schools was ten days shorter. When the percentages of over-ageness in district schools are considered in connection with the foregoing facts of very poor attendance, it seems certain that many district school children must be completing their grades in less than seven months of actual attendance.

In Secondary Schools. How this affects the secondary school work of district school pupils cannot be closely shown, since the 36 per cent of district school pupils of fifteen years of age or older, who continue in school chiefly outside of their home district, are likely to be a more select group than the 50 per cent of children of the same age in consolidated townships, who continue in school mostly in their own schools. A consensus of the opinions of the principals of the high schools in Kalamazoo County, taken in 1907, showed the district-school-prepared high school students to be less well prepared than the town-school-prepared high school students, in the single subject of English. The relative preparedness of students leaving each type of school to go to work, is shown in Table XLIV. The figures here are more complete for the consolidated schools; but their larger percentage of high school attendance would easily account for their better showing. The noticeable fact in this table is the relatively large number in the consolidated schools who

finish high school before entering some business occupation. Neither type of school has as yet in these localities helped pupils entering the occupation of farming to a median preparation of more than eight grades, though here, also, the advantage rests, as would be expected, with the consolidated school in the number held through the high school.

Recitation Periods. Tables XLV and XLVI show the distribution of children to each grade in the two types of schools and the distribution and totals of daily recitation times, by subjects and by grades. Waiving the stimulus that is said to come to children and teachers from large classes, and placing the comparison on a quantitative basis, expressed in minutes (putting the showing for each grade in both types of school in a couplet with the districts first to facilitate reading), each first grade child gets: 13—6; each second grade child, 20—4; each third grade child, 22—5; each fourth grade child, 27—7; each fifth grade child, 27—7; each sixth grade child, 30—7; each seventh grade child, 26—8; and each eighth grade child, 45—8. The great apparent advantage of the district school is larger than shown by these figures, since the typical district school has 16 children in six grades. The long recitation time in the first grade of the consolidated schools is due to A and B divisions of the beginners' section really making it three grades as compared with two in the district school.

Individual grades in the district schools get from one-third to one-half the recitation time in each subject that the individual grades of the consolidated schools get, with the exception of such subjects as spelling and penmanship, where the difference is less. Neither type of school reported instruction in music; drawing was reported taught in the consolidated schools, and nature study and agriculture are taught more or less in each kind of school.

District School Program. When reading the daily programs of recitations and out-of-class activities presented in Tables XLVII and XLVIII, it should be kept in mind that the typical district school of the four townships reviewed had but 16 pupils in six grades. However, even such a district school presents a complicated program-making problem, if the out-of-class activities are successfully controlled and directed by

the teacher. A very noticeable difference in these programs is the much shorter day of young children in this district school. There was much play outside of the school-room for all of the younger children; and a reading of the whole day's program of recitations and other work must make the teacher of one or two grades skeptical. However, the writer knows, from frequent visits to this district school, that programs as complete as this one shown were put through day after day; and that teacher and pupils exhibited an attitude of exhilaration and joy. As was said when this program was first offered, however, it represents the best, not the typical district school found—the possible rather than the actual situation—the problem of district school organization and instruction well started in the process of being worked out.

Consolidated School Program. In connection with the program of the elementary grades of the best consolidated school found, it should be remembered that this school was selected from only four observed. The greater maturity, better educational and professional preparation, and longer experience of the four teachers in this school, all proved valuable in the actual work of the school, at least to the extent of the 17 per cent better wages received by these teachers. In this school, the elementary grades were in a separate building and the principal of the building was a mature woman of excellent personal poise and good executive ability. There was unity of spirit and aggressiveness of action in this school. Good examples of the same merits were found in separate rooms in other schools, but this school had team work.

In no respect is the child so much at the mercy of the teacher as in the recitation period; and if the teacher has slight capacity for instruction, the small class and the short recitation period may employ to the child's advantage the little that the teacher has. A teacher of the minimum legal age, without practice experience, with a meager fund of information, with no professional knowledge and no effective supervision, in the presence of a large class with twenty or twenty-five minute recitation period and with another grade of twenty pupils in the same room, is swamped. It is merciful to consider the poor teacher in such cases, but is it not both merciful and just to think of the

children, for in so doing, mercy and justice are both multiplied as many times as the number of children in the room exceeds the number of teachers. The injustice which has been done to many district school children for years in the grade of instruction provided for them, is reiterated and accentuated by the situation in such rooms as the one just described, in the consolidated school. Neither the best school of either type, represented by the programs printed in Tables XLVII and XLVIII, nor the worst condition in schools of either type suggested in the preceding paragraph, represents the general situation; but the best schools encourage, and the worst schools demand, investigation.

Relative Merits. Which type of instruction,—that typified in Table XLVII, many grades with a few pupils in each grade with a short and sharp recitation period and a long period of pretty much entirely self-directed out-of-class activity, in the presence of a lively variety of life in the actions of a group of children ranging in age through the whole elementary school period; or that imperfectly typified in Table XLVIII (the true type of graded school has but one grade in a room), two grades in each room, a large group of pupils in each grade, a long recitation period, a less long but more consciously directed period of out-of-class activities in the presence of necessarily much less wide scope of life in both words and actions—which of these types gets the best results for the children, is not settled by the unscientifically established concession of superiority to the graded type, which is common among educators.

Since this whole question rests, as yet, largely on opinion, and believing that this investigation and a half life-time of somewhat intimate experience in the rural educational situation gives some basis for an opinion, the writer feels free to say that, in the light of facts of both research and experience, the kind of school typified in Table XLVII, the whole school type if it may be so designated, is, in so far as developing life is concerned, the better type for country children. These children live in whole homes which produce as well as consume; they know about a whole industry and participate in it all in thought, if not always in action; they know a whole church, if any; they have time to fill in by imagination the meager outlines of government which the

local life affords; they think in the large terms of Nature's seasons and laws; in short, they have a long youth, their life is extensive rather than intensive; and the district school when at its best is a whole school, and it is the best type of elementary school yet devised for purposes of instructing country children for their kind of a situation. This is neither denying nor affirming the superiority of the graded type of school for urban children, whose whole life situation is in many respects distinctly different.

Section IV. The Institution

Institutional Service. But meager statistics were accumulated which bear directly on the institutional services of either type of rural school in other respects than those already discussed, which pertain directly to the schools as if they were isolated from the community family of institutions. The large social service which a school renders by exemplifying individual institutional success has already been suggested. Its outside social service is directly related to its inside life and it is not a matter which lends itself readily, as yet, to expressions in statistical details and summaries. However, some materials are at hand bearing on the matter. That a school is chiefly a physical thing in general thought, is suggested by the well known practice of exhibiting buildings and equipment to visitors rather than showing teachers and products. That the school teachers in both types of schools have somewhat this same attitude, is shown by their answers to the question—What are the present needs of this school?—for, in practically all cases, the answers had reference to the school plant.

Actual Conditions. In pictures for which the camera has been judiciously placed in front of the school building and at an advantageous distance, many district schools and most consolidated schools look fairly well; and a closer inspection would, in most cases, verify the first good impression. But in too many cases, with both types of schools, the camera would see another and a very different sight if it were placed within or behind these same buildings. For instance, behind one consolidated school which presents a broad and innocently open front to the highway and to the general public through a widely published picture, there is an example of assembling, without consolida-

tating, several district school out-houses. The most comfortable explanation of the existing conditions in the particular just referred to, which is as bad on a smaller scale in many districts and in many particulars less directly related to sanitation and decency, is that of utter financial exhaustion. However, it is only honest to say that very bad physical conditions are the exception rather than the rule; and that, on the whole, the school plants are a true reflection of the ideas of the several communities, which are wholesome in most respects.

Model Plants. Students of rural education are familiar with the model rural school houses and equipments of the district school type exemplified on the campus of the New York State College of Agriculture at Cornell University, Ithaca, N. Y., and on the campus of the State Normal School at Kirksville, Mo. These models suggest the possible uses of an up-to-date school plant in rural localities for the illustration of ideas of architecture, utility, and sanitation. The model building for the consolidated rural school, located in the open country away from the facilities for lighting and sanitation of larger buildings which town location gives, is a much more difficult and a much less well worked-out problem. Nothing approaching a model school plant was found by this study.

Community Co-operation. There is very little evidence presented in any of the tables relative to the co-operative activities of schools and other community institutions. There is considerable unconscious co-operation such as appears in pupils taking questions home for assistance; homes making effort to promote regularity and punctuality in school; a few instances of interchange between the school and the industry of agriculture, in seed-testing and the use of garden tools; schools preparing parts or all of programs for Grange meetings; exhibits by schools at fairs; the inviting of schools to attend farmers' institutes; and the taking part by adults in special school programs, literary societies, and lyceums. The best example of co-operation is suggested in Table VII in the item showing an annual circulation of 4438 volumes by the Kinsman library. The school children and vans help to make this large circulation possible.

Extension Education. The value of either the district school or the consolidated school for purposes of extension education, is as yet unknown. But it seems certain that, since extension teaching for the most part must be at least of secondary grade, the consolidated school is much more directly adaptable to such work. Some items were shown which signify the extent to which such indirect means as the annual meeting, the school libraries, the course of study, social activities and public entertainments, and the interchange of visits between the homes and the school or teacher, were utilized. These items were not in all cases closely verified, but they are as nearly correct as first-hand interviews with directly interested participants could get them. They are summarized in Tables VII, XXXIII, and XLI. A richly localized curriculum which still keeps its balance in a philosophical appreciation of the past and distant as well as of the near and present, is yet to be worked out for rural schools. Such a curriculum will afford multiple opportunities for sympathetic, voluntary, competent and unostentatious promotion by the teacher of the best things in the community life.

Supplementary Evidence. In a study of the efficiency of the consolidated rural schools in Delaware County, Indiana, by J. F. Bobbitt (see *The Elementary School Teacher,* December, 1911) some facts which supplement this discussion were established by statistical evidence. This evidence was gained from the official records of six graded consolidated schools, each having from four to eight teachers, and of thirty-four one-teacher rural schools of about the same total enrollment as the consolidated schools studied. Mr. Bobbitt's findings are: The average number of days' attendance by each student was, in the consolidated school, 111.1 days; and in the one-room schools, 107.1 days. The attendance in the seventh and eighth grades is 8 to 12 per cent better in the consolidated school. In the consolidated schools, 61 students took the final examination; of these, 45 passed and 16 failed. The percentage successful was 73.8. In the one-room schools, 71 took the final examinations—52 passed and 19 failed. The percentage of successful was 73.2.

Section V. Specific Constructive Suggestions

In writing some of the foregoing sections, it has seemed to be impossible to make constructive suggestions until the whole school situation had been canvassed as closely as the facts in hand permitted. These facts have now been reviewed with as much fullness of itemization as the patience of the reader is thought to warrant. The following suggestions may seem to be, even after all the detail of information, somewhat naked of qualifications and hence dogmatic. But they represent the present stage of thought of the writer and, though they are stated confidently, there will be no hesitancy in abandoning them for something better when further information and thought shall prompt a change.

Organization. As was intended in Section I of this chapter, taxation is very unequally distributed in the district school townships. This could be corrected by making the whole township, instead of the district, the unit for taxation and administration. This larger unit of administration would enable, also, the most economical distribution of the children of the township to the minimum necessary number of elementary schools. There would also be opportunity for unified and more economical provision of high school instruction for the children, either within or without the township; and the whole range of administration, including such major items as—employing teachers, securing effective supervision, purchasing supplies, and keeping records of funds and school statistics, could be simplified and improved. It seems likely, judging from the township administration as shown in the consolidated schools, that more money would be raised and spent for education. Richland township adopted the township unit for purposes of taxation and administration by a referendum vote April 1, 1912. There was a majority of three votes.

Transportation. The high tax rate and the high per capita cost of the consolidated schools results from the great cost of transportation and the provision of high school instruction for a small number of pupils. Transportation expenses were distributed as follows, in the consolidated district of Vernon:

Driver	Amount Paid Per Day	Distance	Number of Children
No. 1	$1.05	5 miles	11
No. 2	2.20	10 "	14
No. 3	1.85	7½ "	14
No. 4	2.90	10 "	26
No. 5	1.68	5 "	22
No. 6	2.25	9½ "	12
No. 7	2.00	8 "	22
No. 8	1.85	7 "	16
No. 9	2.00	8 "	18
No. 10	.55	4 "	3

The last item is that of one family living on a hilly road and having the only children on that road, which made it economical to pay this family to furnish their own conveyance. For the ensuing year it was planned to divide route four, a long and inconvenient route, into two routes. These items show the distinctly local character of the problem of economical transportation. The exigencies of the case suggest that every able-bodied child within a distance of two miles be permitted to walk. Little children should not be penalized to the extent of very long and uncomfortable days away from their parents, and subjected to the care and teaching of an immature, inexperienced, and illy prepared youth, in order to save money to maintain a high school of low standard.

The School Unit. The township is too large a unit for an elementary school and too small a unit for a high school. The 148 pupils in the high schools of the four consolidated schools under review, could be taught much better and more economically in one high school having four teachers, each teacher in his own field of science or mathematics or history or language and literature, than they are now taught in four high schools by nine teachers. The township or, as advocated by Professor E. P. Cubberley, the county, affords an excellent unit for taxation and administration; but the unit for the elementary and the high school must be different, by the dictation of physical conditions governing a sparse rural population whose chief economic resource is farm property. It seems clear that if the rural townships studied here ever get good secondary school instruction for their youth within driving distances of their homes, they will be helped to it by the state. (See "The Improvement of

Rural Schools," E. P. Cubberley, Riverside Educational Monograph Series.)

Professional Safeguards. Constructive suggestions for the improvement of instruction in rural schools are difficult to make because the present possible maximum limit of statutory safeguards is not known. Neither has an adequate minimum requirement been placed at the threshold of the profession. The writer suggests a minimum age of 18 years, a minimum academic preparation of twelve grades and a minimum professional training of six weeks, for beginners, the training to be increased to twelve weeks before the second year of teaching and to nine months before the third year of teaching. It is further suggested that enough money invested in capable and devoted supervisors of rural teaching, in both types of schools, would provide a direct and effective method for improving instruction.

Compulsory Attendance. Granted an adequate school plant and successful teachers, the remaining duty of the state is to insure the benefits of these provisions to every child who is capable of being instructed. The largest economy is found in the fullest use of the provisions for which money has already been spent. Specifically, the suggestion is that the present truancy law, which covers all unexcused children between the ages of seven and sixteen years in Michigan, and in Ohio, all unexcused children between the ages of eight and fourteen years, be rigidly enforced. It is suggested, also, that the Ohio age period for compulsory attendance be extended two years.

Successful Teachers. Two school problems persist through the years; one, to get the maximum service at a minimum cost; the other, the provision of good teachers. Neither of these problems is being very successfully solved by either of the types of rural schools studied. Maximum school service for these communities should include first class elementary and secondary schools. Good teachers for rural schools must make specific preparation for their peculiar work in addition to the development of a rich personality sustained by intellectual, social, and spiritual culture. The states must provide, as they have not provided in the past, the opportunity for prospective teachers of rural schools to get the specific preparation needed to equip them for their distinctive task. This preparation should include

three groups of subjects: first, such as give a knowledge of children and of their organization, management and instruction; second, such subjects as give power for localizing the curriculum in natural, industrial, and domestic illustrations and applications; and third, a group of subjects intended to develop social intelligence and inspire purposes of rural social participation and leadership.

Demonstration Schools. One further and more general suggestion seems fitting. Workable methods and an applicable curriculum for the rural common schools must be derived in these schools. For refining the processes of instruction in these schools, certain typical rural schools should be maintained. These demonstration schools should be in affiliation with normal schools and agricultural colleges and should be taught by teachers of splendid personality, first rate ability, the best training and experience, and at a salary sufficient to command their services long enough for them to adapt their processes of instruction and the variety and selection of the materials used, to the true perspective of rural education. The greatest need of the rural elementary school is the revelation that would come from such demonstration schools. Rural teachers should receive this revelation before beginning their work.

Division II. Community Considerations

Necessary Qualifications. The background of the whole question of the maintenance and efficiency of rural schools is determined by the standards of life—physical, industrial, intellectual, social, and spiritual—of the rural population. Local studies of rural education must, therefore, attempt to define this background. This was done in Chapter II directly, and in Chapter III incidentally; and the suggestions just made in concluding Division I of this chapter were made with this background in mind.

The extent to which the suggestions offered are applicable to other localities, must be determined by research in each particular locality. Unauthenticated generalizations about both types of rural schools have been sown broadcast in public prints. All unqualified statements in this study should be understood, once

for all, to be intended for application in the specified local areas from which the facts upon which they are based were obtained.

The conviction has grown upon the writer that this study is too broad in its scope; that it should have been intensive rather than comparative; that a mass of unscientific experience is, perhaps, more directly applicable in service than it is in definitive discussion; that details are appreciated in value by familiarity; that respect for the whole truth is bred by the necessarily plodding approach to it through what the inexperienced research student finds to be a veritable fog of facts; and that there are as many wonders awaiting the skilled handler of the social microscope as ever glorified the physical world to the histologist.

A Whole Situation. This study has tried to keep the whole rural situation in view. Rural communities challenge general statements and snap conclusions by the apparent simplicity of their organization. These statements and conclusions become the tinsel warp and woof of a shoddy fabric, which may take a very dignified name. Forms in social study have been derived, chiefly, in the practice of studying human beings in groups; and the forms, vocabulary and phraseology of such study have become the common possessions of reading people. Teachers, preachers, editors, politicians, research scholars, and publishers are using this same outfit of forms, words, and phrases in studies of country life. This stained glass inspection can not see the real rural situation. Social studies of country life have generally gone about as far as the words isolation and individualism and have stopped there, apparently forgetting that isolation is a physical fact and no longer, if it ever was, necessarily a state of mind, and that individuals who have the time and the inclination to think for themselves may be as interesting subjects for social study as are the herded groups of mankind. Country people are not easily grouped; they question their leaders, they suspect philanthropy, they hate patronage, and they despise the dilettante when they recognize him.

Community Characteristics. Persistent human habits, both personal and social, are rooted in the common characteristics of humanity; and their manifestations as between individuals and as between communities vary less elementally than in forms of expression. The student of country life must learn to identify

correctly the various surface indications with the true grade of thinking which they imperfectly reveal. He must set up new standards or, at least, mark the existing urban social standards with a new scale of values.

Prolonged and intimate association by the writer with the people of the localities which form the basis of this discussion, has forced the conviction that it is not true, as might be supposed from observing these communities still puzzled with the coarse institutional adjustments of society, that many of the finer social adjustments, usually credited to institutional intercourse, have not been acquired. Native human equipment includes capacity and aptness for social adjustment, which tends to keep a dynamic character in spite of the lack of institutional opportunity. Because of this characteristic of consciousness, one novel and therefore vivid experience plus time to work it over mentally may teach more than multiple experiences of the same kind, with a diversely pre-occupied mind.

Industry

An attempt to develop a conception of solidarity in the life of one of the rural communities being considered must take account of the kind of people and the sort of place. The features of a country locality for the purposes of a social study are its relative location, its soils, its rainfall, its temperature and their distribution. The facts of most significance about the kind of people are the qualities of the native stock as revealed by their origins, traditions and history and the proportion of native and foreign born, as well as the ratio of owners and renters. In thinking the place and the people into the close and happy articulation which is necessary in order to arrive at the conception of the community as a unit, the industrial factor is the first large feature of the situation.

Economic Questions. When thought begins, questions multiply. Is the population the exact quota needed for industrial development? Are the financial resources of the population truly representative of an economical and proportionate distribution to them of the results of their production? Are the local public utilities administered to the point of maximum service at the least consistent cost? Is the community, or inter-

community, employment of truly expert industrial advisers feasible? Answers to these questions must be found in intensive research. Here, as in the school situation, the chief demand of aggressively ambitious men is for more money. Industry affords many examples of too small a working capital. This is conspicuously true in agriculture. On many of the farms which underlie this study, farm and domestic plans and conveniences showed clearly a lack of money. Is the lack of working capital in agriculture to be supplied from within, by the enhanced production aided by the better markets resulting from a concentration of population? Will the millions of federal appropriations for minimizing waste from pests and ignorance, solve the question of capital for the industry of agriculture?

Is the economic situation, as it relates to the cost of collecting, distributing and marketing agricultural products, in great need of statesmanlike revision? The writer was very earnestly told by three leading farmers of as many localities, in a series of farmers' institutes recently, that what they needed in order to make suggested improvements in their schools was, not so much the inclination—they already had this—but the money. There was no doubting the honesty of conviction of these men, all educated, travelled, financially well to do, and fond of farming; that they spoke for the farmers of their localities; and that to ask these localities to maintain such an institution as the school at a rate of local taxation equalling that of a nearby city was foolish because it was an economic impossibility.

What to do in a rural locality, without supplemental aid from outside, in and for any one of its fundamental institutions, must be determined in full recognition of the rights and the condition of every other one of these institutions and in the presence of things as they are. No transient observer is likely to get into this presence. The one thing that is most deeply veiled is the economic situation; and this is the most important thing to know, in order to decide what can be done. Speaking of the rural community as a unit, its first need is maximum industrial results and the distribution of these results to individuals and to families in accordance with the principle of the square deal.

Agricultural Survey. The best agricultural survey yet made in America is reported in Bulletin 295, The College of Agricul-

ture, Cornell University. For the rural communities being studied here, the most valuable constructive fact of industrial significance presented in this bulletin, is found on page 524, under the "Summary of Most Profitable Farms," where it is said:

"One of the most striking characteristics of these successful farms is the diversity of products. On each farm there are two to four leading products, and in most cases many minor products. Those with three leading products are doing better than those with only two. By combining two or more leading products, the receipts are greatly increased without much increase in expenses. For example, milk, potatoes, and hay may be raised for sale with little more labor than is required for producing milk. The combination of all three requires little more horses or equipment than is required for any one. Other combinations are equally efficient. The minor enterprises, as eggs, colts, etc., also help."

The Homes

Such an estimate as could be gained by personal inspection and interviews and from the Federal Census Bureau statistics (see Tables I to V, inclusive), leads to the conclusion that the local farming areas studied were at least equal to the average general farming communities of the Lake Region, in industrial success. The question which is always raised by presence in such communities, and which was intensified in interest by the closer observation of the house to house survey reported in Tables IX to XXVI, inclusive, is—What sort of home life is typical of these communities? This question is answered, in so far as the information gained by this survey answers it, in Table XXVI.

Composite Picture of Homes. In the following paragraphs, the composite picture of the homes visited is presented. The items for owners' homes, 77 per cent of the population in the townships surveyed, are given and the same item, when it is different, for renters' homes is given in parenthesis immediately following the numeral for owners' homes, in each case. This facilitates comparison and saves repetition. Owners' homes, in these areas, are headed by people of the median age of 49 (38) years; there are two adults; 58 (33) per cent have no children and the median number is one child in the 42 per cent of homes having children; the school is one and one-fourth miles away,

and the trading point two and one-half miles; 15 per cent (5 per cent) are dissatisfied with the school; 60 per cent are represented in church membership and 68 per cent (71 per cent) are represented in church attendance; 55 per cent (43 per cent) have members in a Sunday school, and 56 per cent (48 per cent) have attendants at these schools; 43 per cent (38 per cent) are represented in the membership of fraternities; 8 per cent (38 per cent) carry no insurance; 55 per cent (25 per cent) carry fire insurance only; and 1 per cent (15 per cent) carry life insurance only, while 35 per cent (21 per cent) carry both fire and life insurance; 10 per cent (5 per cent) are represented in social organizations; 20 per cent (3 per cent) are represented in some extension course; 10 per cent (1 per cent) are members of co-operative organizations; 43 per cent (63 per cent) are without telephones; $15 is the median cost of the telephone; and 37 per cent (53 per cent) use the mail for buying or selling produce.

The median number of books owned is 50 (45); median number of books purchased the past year, 6 (7); 40 per cent (43 per cent) make use of library facilities and the median number of library books used is 9 (10); 50 per cent (63 per cent) visit mostly in the country; 31 per cent (20 per cent) visit mostly in the city; 30 per cent (36 per cent) correspond mostly with country people, and 43 per cent (36 per cent) mostly with city people; the median number of newspapers taken is two; 65 per cent (56 per cent) take magazines, and the median number taken is two; 60 per cent (43 per cent) take farm papers and the median number taken is one; 70 per cent (16 per cent) take government bulletins and the median number taken is 6 (4); 5 per cent (1 per cent) take circulating reading; 26 per cent (15 per cent) are represented in offices of various organizations; 36 per cent (23 per cent) have modern conveniences in the home; 20 per cent (6 per cent) are making repairs; 8 per cent are building; and the median general impression given by owners' premises is good, while the median for renters' is fair, in a scale of "excellent," "good," "fair" and "poor."

It is difficult to keep all of the features of this doubly composite picture in perspective. These homes seem to have too small families and too little young life. There seems to be at

least a generation's difference in the homes of the owners and renters; but the renters are eleven years younger and possibly some of them will catch up to the grade of owners by the time they reach the owning age. The ten to seventy per cent who do the things inquired about are far easier to consider than are the thirty to ninety per cent who do not do these things, in solving the problem of what is known, thought about, discussed, and done, in the homes of these farm communities.

Constructive Problem. The home which has individual members enough to allow range of age and consequent variety of interest; which has inside vitality and outside connections, through visiting, correspondence, travel, trading, telephone, publications taken, school, and active membership in various local organizations, with the probability of some of the family holding executive offices, and the possibility of their going as delegates or visitors to outside county or state federations of these organizations; such a home is likely to become a clearing house of information, custom, manners, taste, modern conveniences, and self-respect. This home is enfranchised with a most significant vote in the life of the community.

The constructive problem of increasing the number and enriching the life of such homes and thereby extending the power of the domestic franchise in all matters of community interest —this is a problem demanding the devoted activity of all other community agencies for progress, working separately and together. The right solution of this problem, united with maximum industrial success, makes up very largely the human and material endowment insuring stability and growth in the educational, governmental and religious institutions which are the superstructure of rural community life. "The Healthful Farmhouse," by A Farmer's Wife, and "The Country Home," by E. P. Powell, are helpful books.

The Church

The present status of church membership, property, annual maintenance, and ministers, may be seen in summary in Table VI. As suggested in explanation of this table, Kinsman township, which has lost least in population, has the most satisfactory church conditions. Decrease in population is no doubt

largely due to the change from hand tools to horse-drawn machinery and it may be that the population of these townships is still larger than the economic conditions warrant, although the readjustment seems to be complete. Conditions of population and economic possibilities cannot be ignored by church organizations. A determination of the church needs and possibilities of the several farm communities reported in Table VI, would evidently furnish ample reasons for reconstructive action.

Present Status. The Michigan townships are relatively twenty-two per cent less well represented in church membership than the Ohio townships; while their fraternity membership is 25 per cent of their population to 17 per cent in the Ohio areas. The facts as to the age, experience, educational and professional preparation of the ministers in these several communities, as shown in Table XII, tell their own story. A combination, for work, of churches that had not pulled together much, in a small community, though each could hear the songs and sermons of the other on summer days when the windows were opened, does not, on the surface, seem difficult; but such action would be indeed drastic in actual application, and nothing short of an inspired conviction of the utter desperation of the present situation could possibly bring it about.

Granted that, including the unchurched population which is 48, 35, 34, and 26 per cent of the total in the several townships, any one of the townships could support two churches which ought to co-operate for community welfare and in many ways mutually reinforce one another, the question becomes—What are their resources and their inspiration for interesting and getting the unchurched into membership? It is a stubborn fact that human resource in this matter turns on financial resource; and country churches do not bond for improvements. This initial recapitalization must evidently come from the presence of more money inside and possibly be supplemented from outside the townships, at least until the local churches gain access to the financial resources of the now unchurched 26 to 48 per cent of their population. Their inspiration for this work is, of course, the native impulse of the Christian religion itself re-enforced by the strongest human instinct—self-preservation—and the developing social impulse for community welfare.

Constructive Suggestion. The best constructive suggestion that has come to the writer was given by an aged minister, who has had a lifetime of familiarity with rural churches. He conceded the necessity for consolidating some of the churches, but said that the situation demanded that young ministers of first-rate ability, training, and consecration acknowledge the need and embrace the opportunity of service in rural parishes, and that their service must be enthusiastic and patient in spite of the small salaries. Charles O. Bemies, of McClellandtown, Pa., and M. B. McNutt, of Plainfield, Ill., and doubtless many men unknown to the public, including one or two referred to but unnamed in this study, exemplify this idea. W. H. Wilson, of the Presbyterian Board of Home Missions, New York City, and G. F. Wells of the Federal Council of the Churches of Christ, in America, 215 Fourth Avenue, New York City, have made searching study of the rural church situation and much of their work is obtainable in print.

Civic Life

Although no specific statistics were gathered to show the civic spirit of the communities studied, the lax enforcement of the truancy law and the small attendance at the annual school meeting, together with other facts of general observation, yielded a suggestion in this respect. Without losing the present union of personal and public interest in civic matters and without decreasing the personal factor but rather broadening it, could an increase be made in the public factor to the extent of giving to it the balance of power in controlling the civic pulse?

Specific Suggestions. The suggestion is that contempt in the court of government comes from too great familiarity with the minor forms and facts of the local applications of civic authority, and that to counteract this low tone, there is need of reiterated statement and illustration of the fundamental rights and duties of citizenship. Personal and local perspective must get its correct color from a constant revivifying, in memory and imagination, of the historical perspective, rich as an autumn landscape with the lights and shadows of the great personalities of the generations who turned their life currents into the river of freedom.

In short, the right of religious freedom, by which every citizen may contribute to establish the moral tone, which becomes the civic tone when expressed in constitution and statute, has its correlative duty of obedience; the right of free speech, by which all citizens may participate in determining the civic policy of action, has the correlative duty of service; and the right to vote, by which male citizens and, in school matters, female citizens, may fix the public expenditures, has the correlative duty of tribute. There is no divorcing of freedom and duty. This is the lesson that needs to be taught in order to conserve the civic needs of these local communities.

Community Solidarity

The foregoing pages are offered in an attempt to keep the original plan to make this study of two types of rural schools find its true perspective and balance itself in the presence of things as they are in the communities where the particular schools studied are located. It is felt that a segregated study of any rural institution, unless correlated with separate studies of the other fundamental institutions of the same communities, may lose the force of reality and tend to dissipate rather than conserve the essential unity of life in small communities.

When the general public has become familiar with current standards of institutional and community life in the country, then intensive studies of one institution and, later, of parts of one institution may safely proceed. But, for the present, the exhibitor of the results of social studies in rural life must carry his stage setting with him.

Adequate Leadership. This suggests the greatest present need in rural progress which is a rationally thought out and clearly stated theory of the whole economic and social situation in the country—certainly beyond the scope of this study and the intellectual range of its author. As already suggested, such a theory would of necessity use new forms, new words, and new phraseology. This would insulate it for the time being from the general public; but the rapidly increasing group of rural life students would welcome it and seek to popularize the general ideas. Leaders would mature this theory in service.

Further progress in country community building calls for a more adequate provision, through institutions founded for such purposes, of men selected, specifically trained and enlisted for life in rural community service. Native talent, enriched intelligence, sensitive sympathies, resolute will,—in short, an individually refined and a socially cultured personality—these are the presuppositions of a leadership equal to the constructive program by which the new country community is to emerge out of the old without losing the worthy ideals of the old.

APPENDIX A

The Comstock, Michigan, Consolidated School

For purposes of comparison with the Ohio consolidated schools studied, and to show the largest consolidated rural school in Michigan, which is in Kalamazoo County, and adjacent to Richland township, whose district schools furnish a part of the research materials for this study, the tabulations presented here have been made.

The Comstock consolidation was made in 1906 and consisted at first of four whole districts and parts of two other districts. The area has since been extended to 18 sections, or one-half of a township. The development has been very rapid in the curriculum, which now includes Domestic Art, Manual Training, Drawing, and Music. Library, laboratory, and class room facilities have been accumulated and excellent service has been rendered by the school, which has become one of the best graded schools in the county, outside of the city of Kalamazoo.

For transportation, three vans and a trolley line which crosses the district and passes near the school, are used. The chief expressions of dissatisfaction are in respect to the tax rate, which has risen from .0024, the first year of consolidation, to approximately .012 in 1911, and to the difficulties of transportation. Extension of the school site, enlargement and improvement of the building, and a comparatively liberal budget for current expenses account for the increase of tax rate.

TABLE I

SUMMARIES OF DISTRICT AND TEACHERS

District		Teachers	
Area in Sections	18	Median Age in Years	25
Tax Valuations	$566,340	Number of Teachers	M-1; F-18
Site in Square Rods	100	Father's Occupation	A-4; I-4; T-1
Value of School Property	$7,000	Educational Preparation,	Med. 14 yrs.
Rate of Local Tax	.012	Kind and Grade of Present Certificate	Life-62%; 2-25%; 3-32%
Total Cost of Transportation	$1,375		
Per Capita Cost of Transp'n	$5		
Total Paid in Teachers' Wages	$3,747		
Annual Cost of Education	*$9,210		
Per Capita Cost of Education Based on Enrollment	$34		Median
Cash on Hand at End of Year	$1,217	Normal School Instruction	18 mos.
Volumes in Library	785	Days Attendance at Institutes	2
Volumes Added During Year	50	Reading Circle Books Read	0
Children of School Age	337	School Journals Taken 1910-11	2
Enrollment	270	Months Experience Teaching	36
Average Daily Attendance	252	Days Employed in School 1910–11	180
Percentage of Enrollment Based on Census	.80	Wages Per Month 1910–11	$110 $45
Percentage of Attendance Based on Enrollment	.93	Cost of Board, Room and Travel Per Month	$18
Days of School	180	Visits by Superintendent	1
Different Teachers	9	Length of His Visits in Hours	½
Median Wages Per Month (Exclusive of Superintendent)	$45	Visits by District Officers	Total 19
Estimated Legal Voters	200	Length of Their Visits in Hrs.	Median ½
Voters at Annual Meeting	60	Visits by Patrons not Officers	Total 75
Women Voters at Meeting	11	Length of Visits in Hours	Median ½
		Homes Visited by Teachers	Total 77
		Social Gatherings Attended by Teachers	Total 58
		Social Gatherings Managed by School	12
		Public Entertainments Given by School	7

*The item for "Annual Cost Education" includes $1000 paid on debt, $600 paid for enlarging site and improving building, and $600 paid for electric and water facilities These items raised the tax rate to .014.

TABLE II

Age-Grade Distribution

Age	Comstock Consolidated School																		
	Grades												In school elsewhere	Total in school	Not entered	Defective	Moved Left	In occupations	Unaccounted for	Grand Total
	1	2	3	4	5	6	7	8	9	10	11	12								
5	21												1	22	4				1	27
6	24	1												25			2		3	30
7	19	7												26			1		2	29
8	5	9	2	3										19			1		1	21
9		5	9	9	3								1	27			1		1	28
10	1	1	3	8	7		1							21		1			3	25
11		1		5	8	9		2						25					2	27
12		1			3	7	4	6					1	22					2	24
13				1	3	3	7	5	2				1	22					3	25
14	1					3	4	3	8	1				20				1	1	22
15					2		1	3	6	3	3	1	1	20			2	6	6	34
16								1	2	2	3	2	1	11			2	7	1	21
17										1	2	7		10			2	8	2	22
18										1		2	3	6				13	1	20
19													4	4			1	12	1	18
Tot.	71	25	14	26	26	22	17	20	18	8	8	12	13	280	4	1	12	47	30	373
	.10	.32	.21	.23	.31	.27	.30	.20	.11	.25	.00	.00	Percentage over-age for grade							

TABLE III

Distribution of Actual Attendance

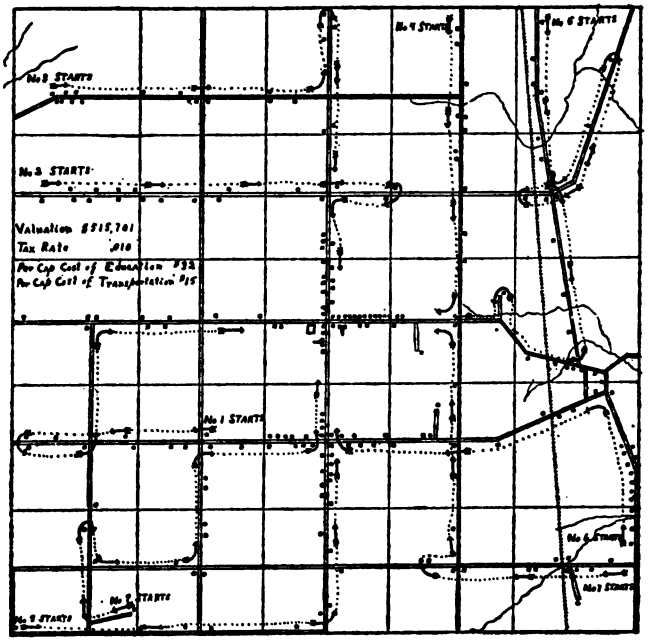
	1–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80	80–90
Total	1	2	5	6	13	14	5	5	7
Per cent	.00	.01	.02	.02	.05	.05	.02	.02	.03
	90–100	100–110	110–120	120–130	130–140	140–150	150–160	160–170	170–180
Total	4	7	7	6	9	11	23	35	102
Per cent	.02	.03	.03	.02	.03	.04	.09	.13	.39

APPENDIX B

Township Maps

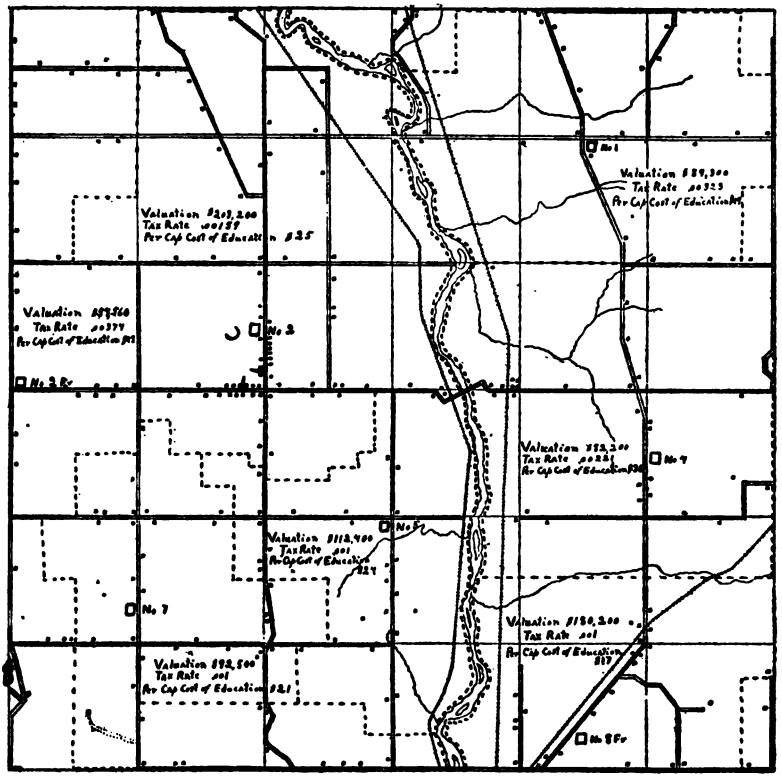
The following maps show the relative size of Michigan and Ohio townships; the irregular areas, valuations, tax rates, and per capita cost of education in the district schools of the Michigan townships; the valuation, tax rate, per capita cost of education, per capita cost of transportation, and the school van routes of the consolidated school townships in Ohio; as well as the section lines, highways, railways, churches, school-houses and residences of the several townships in both states. It will be observed that each Ohio township has an area of twenty-five square miles, while the Michigan township has an area of thirty-six square miles.

Gustavus Township



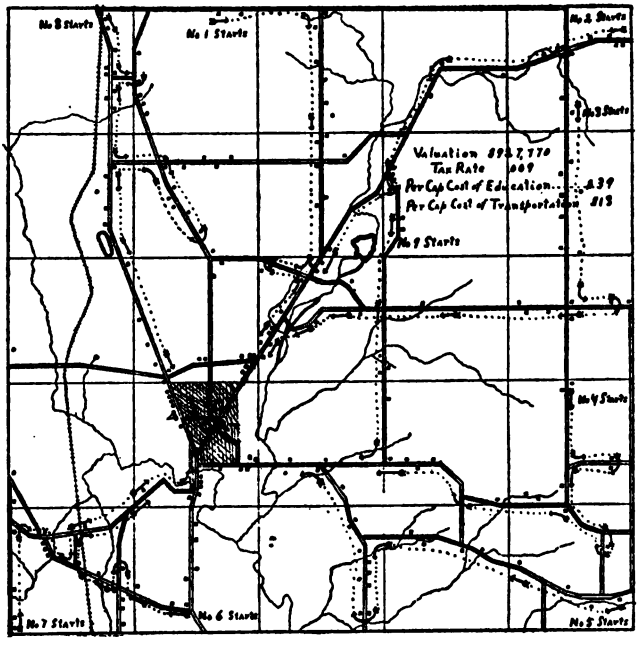
— Section line. = Road. -|-|-|-|- Railroad. ····+ Van Route. □ School House. ± Church. ■ Residence.

COOPER TOWNSHIP



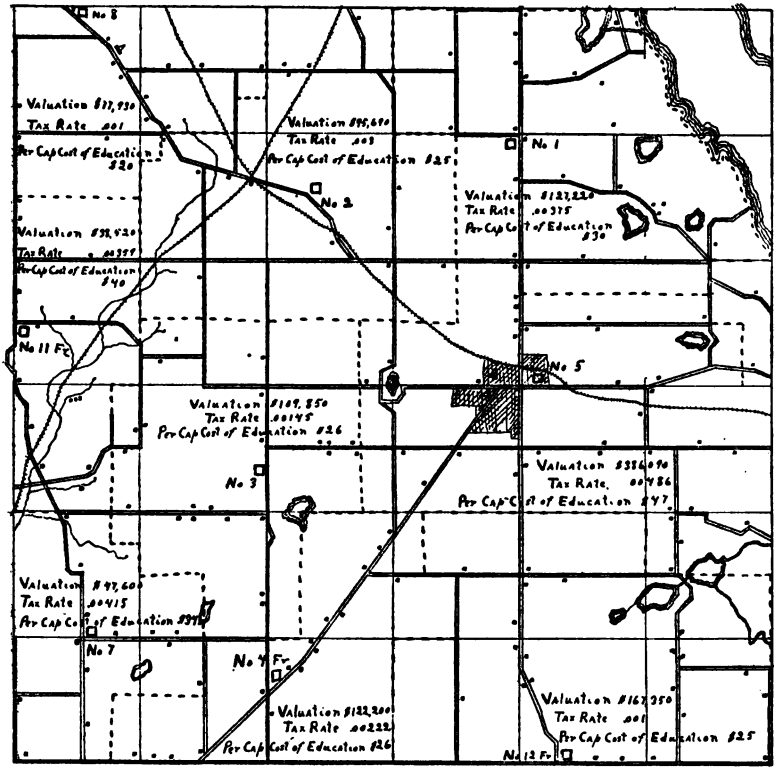
— Section Line. = Road. -|-|-|- Railroad. - - - District Boundary.
□ School House. ± Church. ■ Residence.

KINSMAN TOWNSHIP



— Section Line. ═ Road. -|-|-|- Railroad. ····→ Van Route. □ School House. ± Church. ■ Residence.

RICHLAND TOWNSHIP



— Section Line. = Road. -|-|-|- Railroad. – – – District Boundary.
□ School House. ± Church. ■ Residence.

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